

# 4th Grade Distance Learning

## Week 4

(April 20th-24th)

Name:

Teacher:



Name \_\_\_\_\_

Date \_\_\_\_\_

# SuperKids® Math Worksheet

## Multiplication using numbers between 9 and 12

$$\begin{array}{r} 11 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 9 \\ \hline \end{array}$$

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$$\begin{array}{r} 11 \\ \times 9 \\ \hline \end{array}$$

Name \_\_\_\_\_

Date \_\_\_\_\_

# SuperKids® Math Worksheet

## Multiplication using numbers between 2 and 12

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

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$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 7 \\ \hline \end{array}$$

## Multiplying By 8 and 9 (A)

Find each product.

$$\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$$

# Five Minute Multiplying Frenzy (A)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Multiply each row number by each column number.

(Range 2 to 12)

×	6	8	7	4	10	2	3	9	5	12
2										
11										
6										
8										
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12										
7										
3										
9										
10										

Time: \_\_\_\_\_

Score: \_\_\_\_\_ /100



## Math Antics Long Division (Week 4)

Hi! Welcome to Math Antics. In this lesson, we are gonna learn about long division.

If you haven't already watched our video about basic division, then be sure to go back and watch that first.

It will make learning long division a lot easier.

Long division is just a way of breaking up a bigger division problem into a series of short division steps like the ones that we did in the basic division video.

The nice thing about long division is that once you know the procedure, you can divide up all kinds of numbers, even if they are REALLY big.

The key to long division is to think about our division problem digit-by-digit.

If our dividend (the number we're dividing up) has a lot of digits, then that means that there will be a lot of division steps to do.

When we learned basic one-step division, all of the dividends were small enough that we could just use the multiplication table to help us find the answer.

But what if we have a division problem like this? 936 divided by 4. 936 is definitely NOT on our multiplication table!

In fact, there's not anything even close to 936, so what do we do?

Well, instead of trying to divide the entire 936 by 4 all at once, let's break this problem up into smaller steps by just trying to divide each digit by 4, one digit at a time ... digit-by-digit.

Do you remember how with multi-digit multiplication and addition, we always start with the smallest digit (the ones place digit) and we work from right to left?

Well division is backwards! We still go digit by digit, but the other way.

We start by trying to divide up the digit in the biggest number place first and we work our way from left to right.

So the first step in this problem is to divide the FIRST digit of our dividend by 4.

We'll just ignore the other digits for now, and that makes it look like we have the division problem 9 divided by 4.

Great! That's easy! It's just a basic division problem like in the last video.

So we ask, "How many '4's will it take to make 9 or almost 9?"

Well, two '4's would be 8, and that's almost 9.

So just like before, we put the 2 in our answer spot on top of the line.

But wait a minute... there's a lot of room up there. Where exactly do we put it?

Well, the answer digit should always go directly above the digit we're dividing.

Since we're dividing the digit 9, our 2 should go right above the 9.

Okay, now we multiply... 2 times 4 is 8, and the 8 goes below the 9 so that we can subtract to get our remainder.

9 minus 8 is 1, so our remainder is 1.



Now at this point in our basic one-step division problems, we would re-write our remainder up in our answer with a little 'r' next to it.

But we aren't going to do that yet because this is long division and we still have more digits to divide (the ones we've been ignoring).

Since we're going digit-by-digit, let's stop ignoring the next digit in our dividend (the 3).

Now you might think that our next division step is to divide that 3 by the 4. But it's not quite that simple.

We had a remainder from our last division step, and we can't just forget about that.

We need to combine that remainder with our next digit and divide them both together.

We do that by bringing down a COPY of the next digit (the 3) and put it right beside the remainder (which is 1).

When we do that, it looks like our remainder is 13. It's kind of like our remainder is teaming up with the next digit over.

And if you think about it, that makes sense because the digits that we were ignoring during our first division step really are part of the remainder, because we still need to divide them.

Okay, so bringing down that next digit makes our remainder bigger.

And that's good because before, the remainder was so small that 4 couldn't divide into it.

But now it's 13, and 4 will divide into 13.

So we ask, "How many '4's will it take to make 13?"

Well, three '4's would be 12, and that's really close without being too big. So let's put 3 in our answer line.

Yep - it goes right over the 3 because that is the next digit we were dividing in this digit-by-digit process.

And then 3 times 4 is 12 which we put right below the 13 so that we can subtract to get the next remainder which will also be 1.

See how we're just repeating the basic division procedure? But we're going further down the screen as we do.

Alright, now that we have a new remainder, it's time for our next division step.

Let's stop ignoring the last digit in the dividend (the 6) and bring down a copy of it to team up with our new remainder.

Together, they form a remainder of 16.

Ah ha! That's good because it's gonna be easy to divide 4 into 16 because 16 is a multiple of 4. It takes exactly four '4's to make 16. So we put a 4 in the last place of our answer line, and then we write the 16 below our new remainder.

Now if we subtract 16 from 16, we see that our last remainder will be zero, which means there's no remainder left.

That's great! We solved the whole division problem digit-by-digit by breaking it up into three basic division steps.

And now we know that 936 divided by 4 equals 234.

And we also know why they call it long division!!

In fact, that was so long, I think I need a coffee break...

Oh man...

that was some loooooooooooooong division!

Wheew... let's see...

Okay, so that problem had a three-digit dividend and it also had three division steps.

But the number of steps isn't always the same as the number of digits we have.

And that's because the number of steps also depends on how big our divisor is.

To see what I mean, let's work two division problems side by side.

These both look like the basic one-step division problems that you did in the last video, don't they?

But as you'll see, one of them is actually a two-step problem.

Let's start with the first problem: 72 divided by 8.

We just ask, "How many '8's does it take to make 72 (or almost 72)?"

Well that's easy! On our multiplication table you can see that 72 is a multiple of 8.

$8 \times 9 = 72$  So we put 9 in our answer line, and we write 72 below, and we see that we have no remainder.

Now let's try the next problem: 72 divided by 3.

If we ask, "How many '3's will it take to make 72 (or almost 72)?", we can see that the answer is not on our multiplication chart.

The biggest multiple of three listed there is 30 which isn't even close.

The reason is that this should really be a two-step problem.

Let's try using the new digit-by-digit method we just learned.

Instead of asking, "How many '3's make 72?", let's just focus on the first digit and ask, "How many '3's does it take to make 7?"

Ah - that's easy. Two '3's would give us 6, which is very close.

So let's put a 2 in the answer line right above the 7.

Then we multiply 2 times 3, and that makes 6.

And we subtract 6 from 7 to get a remainder of 1.

Now for the second step...

We bring down a copy of the next digit (the 2) and we combine it with the 1 to get a new remainder of 12.

Then we ask, "How many '3's does it take to make 12?" and the answer to that is exactly 4.

So we write a 4 in the answer line, and  $3 \times 4 = 12$ .

$12 - 12 = 0$  So we have no remainder!

We're done! 72 divided by 3 is 24.

Now here's the interesting thing about these examples.

The first problem could have been a two-step problem also.

If we had taken it digit-by-digit, we would have first asked, "How many '8's does it take to make 7 (or almost 7)?"

But the answer would have been zero since 8 is too big to divide into 7.

We would have put zero in our answer line and the remainder would have just been 7.

So basically, we just skipped that step. And that'll happen with digit-by-digit division sometimes.

If the number is too small to divide into, you just put a zero in the answer line and you move on to the next digit.

Okay, now that you know the procedure for long division, are you ready to see a really long problem?

Good - I thought so!

Let's divide 315,270 by 5.

Now don't worry... it's really not that hard if you just go digit-by-digit.

I'm gonna work the problem pretty fast, so don't worry if you don't follow all the math.

Just focus on the repeating division process as we go along. Are you ready?

The first digit is 3. How many times will 5 divide into 3? Zero.

5 is too big. So let's just skip that step and combine our first digit with our next digit.

So how many times does 5 divide into 31? Six.

6 times 5 is 30. And 31 minus 30 gives us a remainder of 1.

Now on to the third digit... We bring a copy of it down to join with the remainder.

And we ask how many times will 5 divide into 15? Three.

3 times 5 is 15. And 15 minus 15 is zero.

On to the next digit...

Now even though our previous remainder was zero, we still bring down a copy of the next digit.

Now we ask how many times will 5 divide into 2? Zero.

5 is too big, so we need to move on to the next digit and bring a copy of it down also.

There, that's better.

Now we ask, how many times will 5 divide into 27? Five.

5 times 5 is 25. And 27 minus 25 gives a remainder of 2.

...now for that last digit, which is a zero.

And you might wonder, "Why do we even have to bring a copy of a zero down? Isn't that nothing?"

But the zero is an important place holder... and when we bring a copy of it down, it changes our remainder of 2 into a remainder of 20. Now that's a big difference!

Now we ask, how many times will 5 divide into 20? Four.

4 times 5 is 20. And 20 minus 20 is zero.

Yes! We're done! There's no more digits to divide.

And you can see that our final answer is: 63,054.

Alright... that's the procedure for long division.

As you can see, it's kinda complicated, so don't get discouraged if you're confused at first.

Like almost everything, it just takes practice.

So, as you get ready to practice some long division problems on your own, here's a few tips that will help you out.

First: If you haven't already done it, memorizing your multiplication table will really help with division.

Second: When you're working problems, it's really important to write neatly and stay organized.

If your writing is messy, it might be hard to keep your columns lined up and that could lead to mistakes.

And if that's the case, try using graph paper to help keep things lined up.

Third: Start with some smaller two or three-digit dividends so you only have a few division steps to do.

Then work up to the longer problems.

And last of all: After each practice problem you do, check your answer with a calculator.

That will let you know right away if you've made any mistakes so you can correct them, and most importantly, learn from them.

And it will give you practice with a calculator, which is also important.

Alright, that's all for this lesson.

Thanks for watching Math Antics, and I'll see ya next time.

Learn more at [www.mathantics.com](http://www.mathantics.com)

## Math Antics Basic Division (Week 4)

Hi and welcome to Math Antics.

In this video lesson, we're gonna learn the basics of division. And if you really understand these basics, then it'll make it much easier learning how to do 'long division' which is the subject of our next video.

Okay, so here's how basic division works. You get a problem like this one: 9 divided by 3, which means you have a total of 9 and you want to divide it into 3 equal groups.

And if you can remember that 9 is an answer to one of the multiplication facts, or that it's an answer on the multiplication table,

then you can see that since  $3 \times 3$  is 9, then 9 divided by 3 is 3. It's that simple!

Well... at least it WAS that simple when you learned about the fact families.

Now it's gonna get a little bit tricky because most division problems aren't quite this easy, like this one: 9 divided by 4

The trouble here is that 9 and 4 aren't part of a fact family, so you can't just find the answer on the multiplication table.

That's because 9 is not a multiple of 4. There's no whole number that you can multiply 4 by and end up with 9.

That means that 9 can't be divided equally into 4 groups without having something left over.

Like if you had 9 cookies and 4 kids, each kid could have 2 cookies but there would be 1 left over.

And in division, that left over amount is called a "remainder".

So the answer to 9 divided by 4 is 2 with a remainder of 1.

Alright, so it's not that hard to figure out a simple division problem when you have a picture like this, but what about when we just have numbers. To do that, we use a special division procedure.

Up until now, you probably have used this division symbol the most.

It works well for very simple division problems, like the ones in our fact families.

But, now that we're gonna be doing some harder problems, we need a new division symbol... this one...

This division symbol is special, because it's almost like a stage that will help us solve our division problem.

And there's three special areas of this stage where the three main parts (or characters) of our division problem will go.

The first area is here under the long horizontal line on our division symbol.

This is the area where we put the number that we will be dividing up.

The fancy math term for this is the "dividend".

Most of the time, the biggest number will go here, because we usually start with a big amount and want to divide it into smaller groups.

The second area is out in front of the curved part of the division symbol.

This is the area where we put the number we will be dividing BY.

The math term for that is the "divisor".

In other words, this number will tell us how many groups we will be dividing our big amount into.

And the third area is up above the horizontal line.

This is where our answer will go, once we figure out what the answer is.

The answer to a division problem is called the "quotient".

The answer tells us how many we will end up with in each group.

So whenever you have a complicated division problem to do, the first step is to re-write your problem in this form.

If you have 9 divided by 4 like this, you put the '9' down here (that's the number we're dividing UP) and you put the '4' out here (that's the number we're dividing BY) and you're ready to start the next step of the procedure.

The next step is the most important step, because it's where you figure out the answer.

And to figure out the answer (which is how many you'll end up in each group after you divide), you have to ask yourself a really important question involving the other two numbers.

The question is, "How many '4's will it take to make 9 or almost 9?"

And the key to answering this question is for the number to be "just right".

Do you remember the story of Goldilocks and the Three Bears?

...how one chair was too big, and one chair was too small, but the other chair was "just right".

Well, it's the same way with our division problem.

If I choose an answer that's too big or too small, it will cause trouble for me.

Here's what I mean...

Let's say that I decide that I only need ONE '4' to make 9. So, I'll write a '1' up here in the spot for the answer.

Well now, the next step in the procedure is to multiply that answer I put there (the 1) by the number of groups out front here (the 4)

and I write the answer to that multiplication down below the number I'm dividing up (the 9).

I do that so I can subtract that amount from the 9 to see how much I'm gonna have left over; to see how big the remainder will be.

And when I do that, I see that 9 minus 4 will give me 5.

Hmmm... that's a pretty big remainder.

In fact, the remainder is bigger than the number I am dividing by, and that's why this answer is trouble.

If the remainder is bigger than the number you are dividing by, it means that you should have picked a bigger answer

because each of the groups you are dividing up into could have gotten more than they did.

Your answer was too small, and so the remainder was too big.

Okay then, I guess I'd better come up with a better answer to the question: "How many '4's will it take to make 9 or almost 9?"

This time, I think I'll pick 3.

So, I put a '3' in the answer space, and then I follow the next step of the procedure like I did before.

I multiply the answer I chose (3) by the number of groups (4) and I write the answer of that multiplication problem (12) down below the number we're dividing up (9).

Now I can subtract that number to see what my remainder will be... or can I?

This looks like trouble again! The answer to my multiplication is bigger than the number we're dividing up, so I can't subtract it.

The remainder would be less than ZERO! And I can't have a remainder less than zero. That can't be right.

Here's the problem... when you choose an answer that's too big, it's like trying to give too many to each group

and then you run out of things to give before the groups are equal.

And if the groups aren't equal they get all upset, [high speed] and if they get all upset they start fighting, and if they start fighting they get in trouble and the teacher puts them in "time out", and then they can't go to recess....

Okay, so 1 was too small: it gave us too big of a remainder.

And 3 is too big: there wouldn't be any remainder at all and the groups wouldn't be equal, which causes big problems!

So let's try 2.

If we say that TWO '4's will make 9 or almost 9, our problem looks like this.

2 goes in the answer spot, and then we do our multiplication procedure... We multiply that 2 by the 4 and we get 8.

Then we write the 8 below the 9 so we can subtract it and find our remainder.

$9 - 8 = 1$ , so that means our remainder is 1. Now that sounds good!

It's less than our number of groups. And you can see with our cookie problem that it's exactly right.

9 cookies divider into 4 groups gives 2 cookies to each group with 1 left over as the remainder, which we put right up here in the answer with an 'r' for remainder. Perfect!

And now you can see how you can do division without using pictures (or cookies) but just with numbers and a procedure to follow.

Let's try a couple more so you really see how it works. Let's try 23 divided by 5.

We start, as always, by making sure our problem is written correctly using our new division symbol.

The 23 is what we'll be dividing up (it's our dividend), so we put it under the line, and the 5 is what we are dividing by (our divisor), so it goes out front.

Ok, so now we ask, "How many fives will it take to make 23 or almost 23?"

Well, ONE '5' would be way to small,

TWO '5's is 10, (that's also too small)

THREE '5's would be 15,

FOUR '5's is 20 (Ohh, that sounds promising)

now FIVE '5's is 25 (and that would be too much)

So, it sounds like 4 is a really good number to pick for our answer, so let's put that on the answer line.

Next, we need to do the step where we multiply the answer (4) by the number of groups (5) and we get 20 which we'll write below the number we're dividing up (23).

Now we subtract those numbers to see what our remainder is: 23 minus 20 is 3.

Well that's good. 3 is less than our number of groups, so it's a reasonable remainder.

So our answer to 23 divided by 5 is 4 with a remainder of 3.

Let's do one more before you try working some out on your own, okay? Let's do 57 divided by 6.

First we set up our problem and then we ask the question, "How many '6's do we need to make 57 or almost 57?"

Well this one's a little more tricky, so I think I might use a multiplication table to help me out.

The nice thing about a multiplication table is that it shows me all the multiples of a number.

For example, since I want to know how many '6's I need, I can look on this row of the chart and see all the multiples of 6.

Here they are: 6, 12, 18, 24, 30, 36, 42, 48, 54, and 60.

We need the multiple that's 57 or almost 57.

And since 57 is not on the list, it looks like 54 is the next closest thing without being too big (like 60).

And to get 54, we need to have NINE '6's, so we will choose 9 as our answer.

Next, we multiply 9 by 6, which we already know will give us 54 because that's what our multiplication table showed us.

Now we need to subtract 54 from 57. That gives us a remainder of 3.

Again, that's good because that's less than our divisor.

So, 57 divided by 6 equals 9 with a remainder of 3.

Alright, that's all for this lesson. And if you're new to division, that's plenty to get you started.

It's really important to master these basic division problems that just involve one step that leaves you with a remainder.

In the next video, we're gonna learn how to take this basic procedure we've learned and repeat it multiple times in a process called "long division".

But before you move on, make sure you really practice what you've learned in this video first.

Good luck and I'll see ya next time.

Learn more at [www.mathantics.com](http://www.mathantics.com)



# Division Day 1 (Apr. 20)

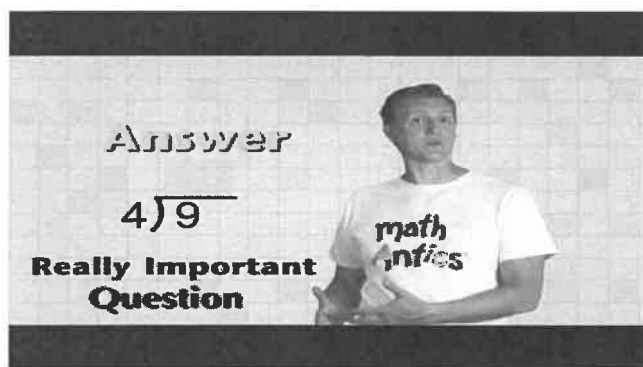
No calculators allowed. All answers that do not divide evenly should have a remainder or be written as a fraction.

\* Required

1. Email address \*

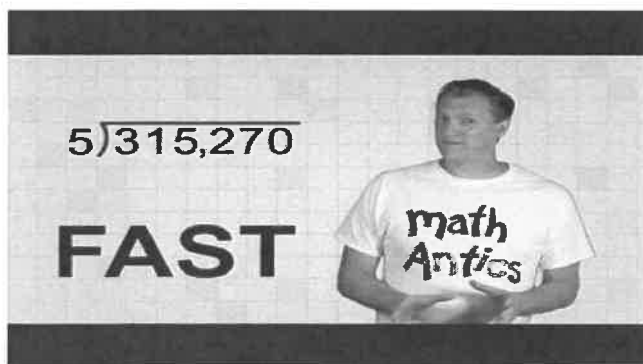
---

## Basic Division



<http://youtube.com/watch?v=KGMf314LUc0>

## Long Division



<http://youtube.com/watch?v=LGqBQrUYua4>

2.  $19 \div 2 = *$

1 point

*Check all that apply.*

- 9 R1  
 9 R2  
 9 1/2  
 8 1/2

3.  $48 \div 5 = *$

1 point

*Check all that apply.*

- 9 R3  
 9 3/5  
 9  
 9 5/3

4.  $27 \div 6 = *$

1 point

*Check all that apply.*

- 4 R3  
 4 3/6  
 5 R1  
 5 R3

5.  $43 \div 8 = *$

1 point

*Check all that apply.*

- 5 R3  
 5 3/8  
 6  
 6 R3

6.  $32 \div 5 = *$

1 point

Check all that apply.

- 6 R2  
 6  $\frac{2}{5}$   
 5 R2  
 7 R2  
 7  $\frac{2}{5}$

7.  $320 \div 4 = *$

1 point

Mark only one oval.

- 80  
 70  
 800  
 700

8.  $4,500 \div 5 = *$

1 point

Mark only one oval.

- 900  
 800  
 700  
 600

9.  $3,000 \div 6 = *$

1 point

*Mark only one oval.* 500 800 700 600

10.  $3,600 \div 9 = *$

1 point

*Mark only one oval.* 400 40 4,000 4

11.  $4,000 \div 5 = *$

1 point

*Mark only one oval.* 800 700 600 80

---

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# Division Day 2 (Apr. 21)

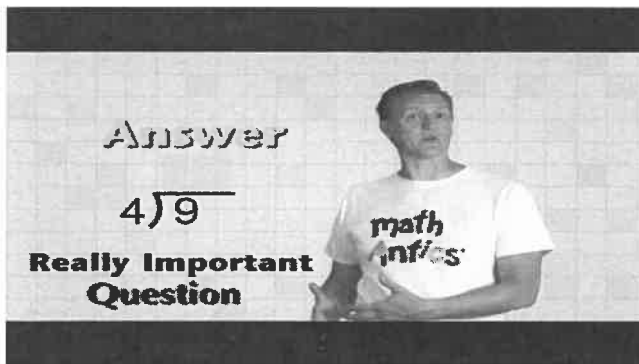
No calculators allowed. All answers that do not divide evenly should have a remainder or be written as a fraction.

\* Required

1. Email address \*

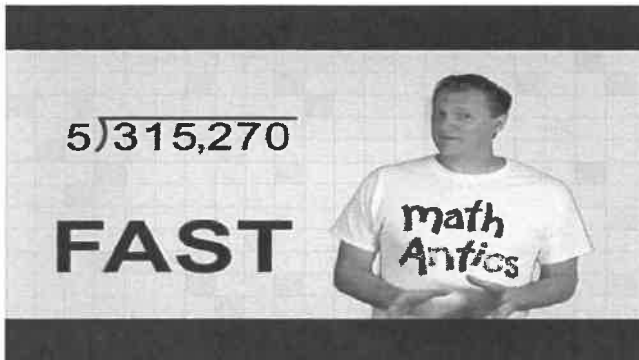
---

## Basic Division



<http://youtube.com/watch?v=KGMf314LUc0>

## Long Division



<http://youtube.com/watch?v=LGqBQrUYua4>

2.  $552 \div 3 = *$

1 point

*Mark only one oval.* 184 194 200 284

3.  $2,945 \div 5 = *$

1 point

*Mark only one oval.* 589 689 599 590

4.  $1,652 \div 7 = *$

1 point

*Mark only one oval.* 236 326 240 246

5.  $4,520 \div 8 = *$

1 point

*Mark only one oval.*

 565 560 665 660

---

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# Division Day 3 (Apr. 22)

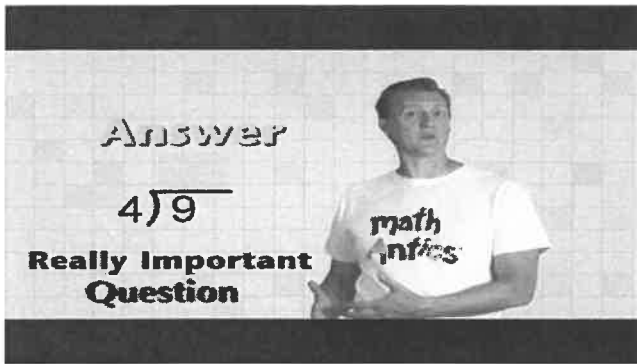
No calculators allowed. All answers that do not divide evenly should have a remainder or be written as a fraction.

\* Required

1. Email address \*

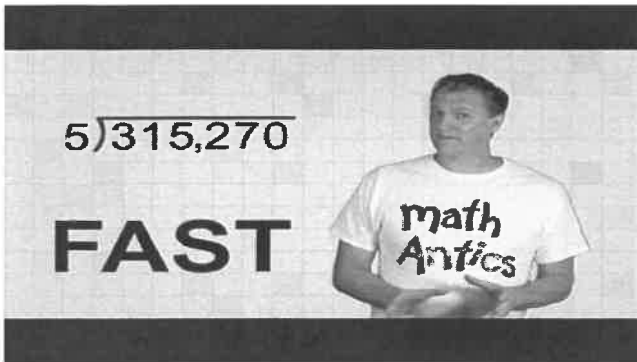
---

## Basic Division



<http://youtube.com/watch?v=KGMf314LUc0>

## Long Division



<http://youtube.com/watch?v=LGqBQrUYua4>



2.  $4,596 \div 4 = *$

1 point

*Mark only one oval.* 1,149 1,549 1,249 1,150

3.  $6,342 \div 3 = *$

1 point

*Mark only one oval.* 2,114 2,100 2,200 2,120

4.  $1,155 \div 5 = *$

1 point

*Mark only one oval.* 231 321 230 240

5.  $3,336 \div 6 = *$

1 point

*Mark only one oval.* 556 560 655 546

6.  $4,520 \div 8 = *$

1 point

*Mark only one oval.* 565 560 665 660

7.  $4,152 \div 3 = *$

1 point

*Mark only one oval.* 1,384 1,484 1,394 1,400

8.  $5,292 \div 7 = *$

1 point

*Mark only one oval.* 756 856 750 765

9.  $3,036 \div 4 = *$

1 point

*Mark only one oval.* 759 769 859 869

10.  $8,265 \div 5 = *$

1 point

*Mark only one oval.* 1,653 1,553 1,663 1,652

---

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# Division Day 4 (Apr. 23)

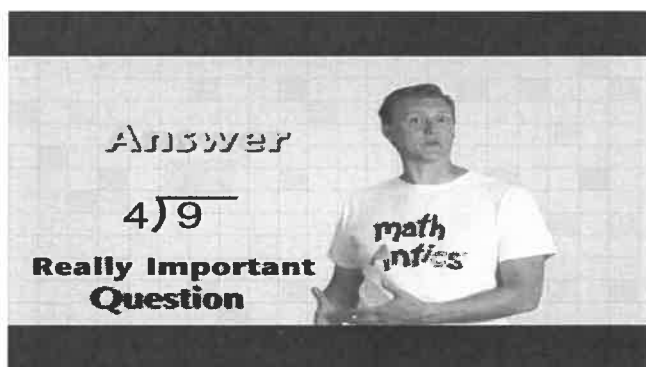
No calculators allowed. All answers that do not divide evenly should have a remainder or be written as a fraction.

\* Required

1. Email address \*

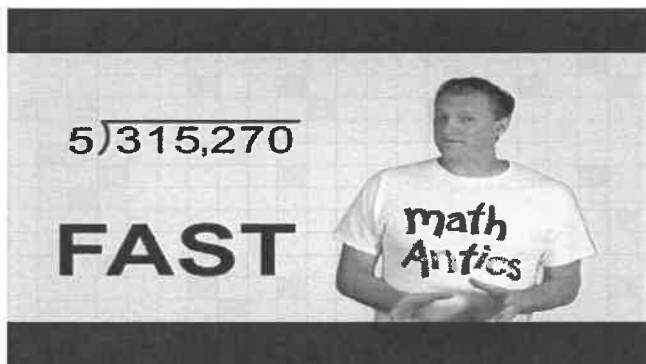
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## Basic Division



<http://youtube.com/watch?v=KGMf314LUc0>

## Long Division



<http://youtube.com/watch?v=LGqBQrUYua4>

2.  $6,206 \div 3 = *$

1 point

*Check all that apply.*

- 2,068 R2  
 2,068  $\frac{2}{3}$   
 268 R2  
 2,068 R0

3.  $8,825 \div 6 = *$

1 point

*Check all that apply.*

- 1,470 R5  
 1,470  $\frac{5}{6}$   
 147 R5  
 1,475

4.  $2,359 \div 9 = *$

1 point

*Check all that apply.*

- 262 R1  
 262  $\frac{1}{9}$   
 262  
 162

5.  $5,389 \div 2 = *$

1 point

*Check all that apply.*

- 2,694 R1  
 2,694  $\frac{1}{2}$   
 2,694  
 2,690

6.  $1,456 \div 5 = *$

1 point

Check all that apply.

- 291 R1
- 291 1/5
- 291
- 291 R5

---

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# Math-Week 4 Review (Apr. 24)

\* Required

1. Which digit is in the ten-thousands place in the number 23,795,354? \* 1 point

---

2. Which digit is in the ten-thousands place in the number 77,566,766? \* 1 point

---

3.  $675 + 387 = *$  1 point

---

4.  $1,379 - 425 = *$  1 point

---

5.  $22 \times 44 = *$  1 point

---

6.  $37 \times 93 = *$  1 point

---

7.  $57 \times 38 = *$  1 point

---

8.  $81 \times 33 = *$

1 point

---

9.  $356 \div 4 = *$

1 point

---

10.  $268 \div 2 = *$

1 point

---

11.  $1,000 \div 40 = *$

1 point

---

---

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Essential Question

# What Is Electricity?

## Engage Your Brain!

Find the answer to the following question in this lesson and record it here.

What causes the girl's hair to stand out from her head?

---

---

---

---

## Active Reading

### Lesson Vocabulary

List the terms. As you learn about each one, make notes in the Interactive Glossary.

---

---

### Main Ideas

The main idea of a paragraph is the most important idea. The main idea may be stated in the first sentence, or it may be stated elsewhere. Active readers look for the main idea by asking themselves, What is this section mostly about?

# All charged

## UP

You can charge a battery. A football player can charge downfield. How is an electric charge different?

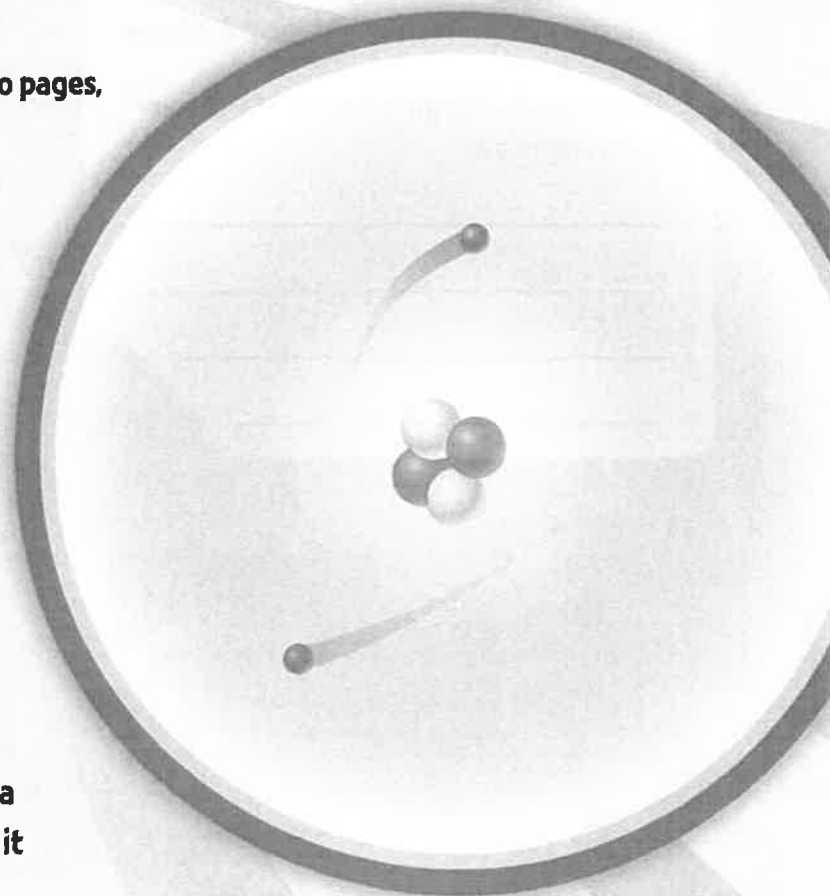
**Active Reading** As you read these two pages, underline the main idea on each page.

**W**hat do you, this book, and your desk all have in common? You are all made of atoms. *Atoms* are the building blocks of all matter. Atoms are so small that you cannot even see them without a special microscope. Atoms are made up of even smaller particles called protons, neutrons, and electrons.

The main difference between protons, electrons, and neutrons is their electric charge. *Electric charge* is a property of a particle that affects how it behaves around other particles.




- Protons have a positive charge (+1).
- Electrons have a negative charge (-1).
- Neutrons are neutral. They have no charge.

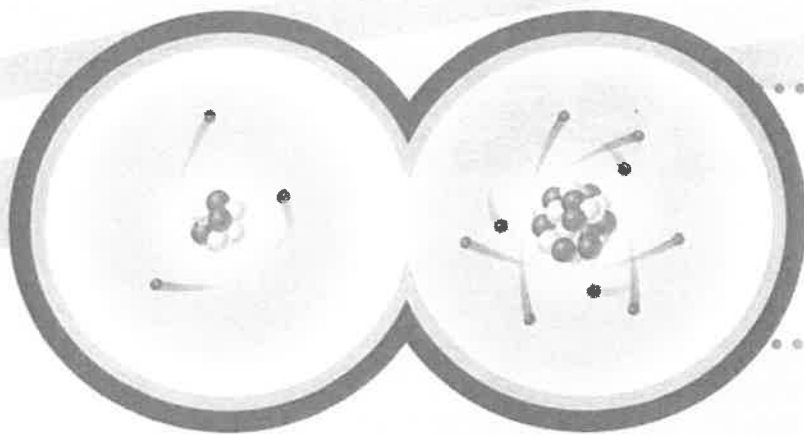
When an atom has equal numbers of protons and electrons, the positive charges and negative charges cancel each other. The atom itself has no charge.



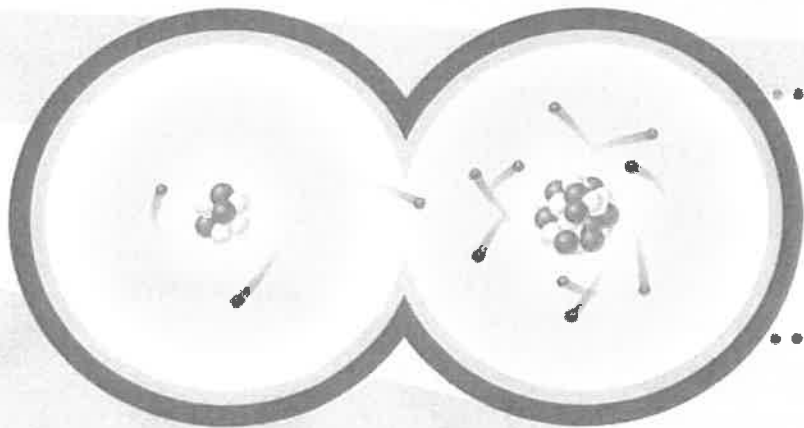
Protons and neutrons are found in a region of the atom called the nucleus. Electrons are found in a region of mostly empty space called the electron cloud.

### Legend

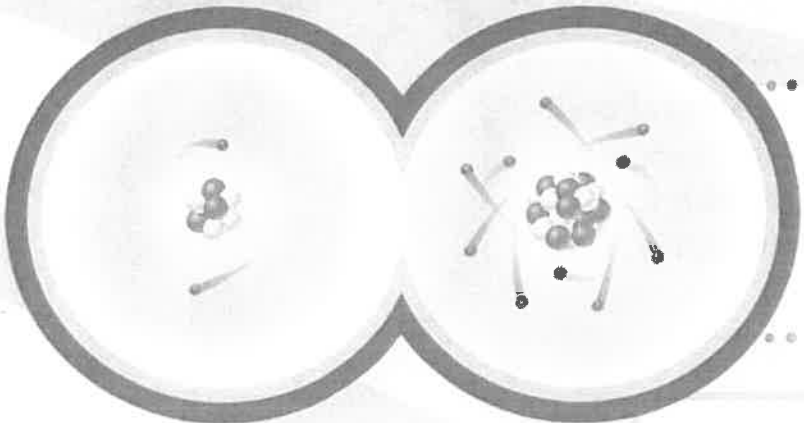
 = neutron  = proton  = electron



Each of these atoms has the same number of protons and electrons. Both atoms are neutral.



An electron from the atom on the left moves to the atom on the right.



The atom on the left now has a charge of +1. The atom on the right has a charge of -1.

Atoms sometimes gain or lose electrons. This gain or loss causes an atom to have an unequal number of positive and negative charges. For example, if an atom with nine protons and nine electrons gains an electron, the atom will have a charge of -1.

If a neutral atom loses an electron, the number of protons will no longer balance the number of electrons. The atom will have a charge of +1.

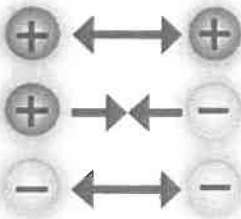
► Draw an atom with three protons, four neutrons, and two electrons.

What is the charge of this atom?

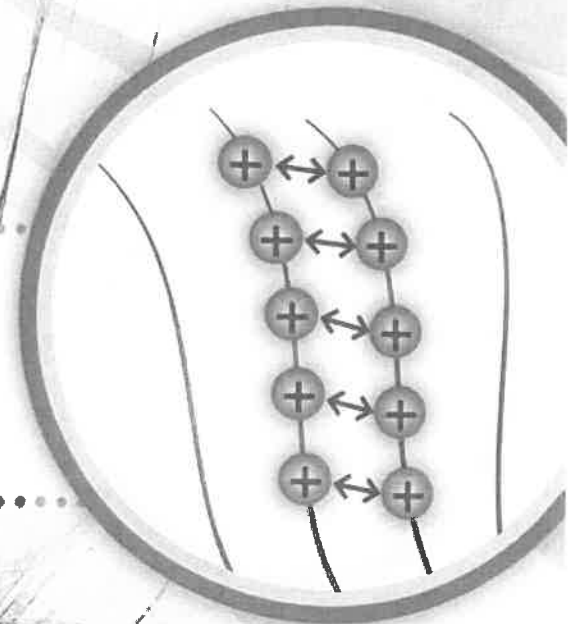
# Opposites Attract

Have you ever had a “bad hair day”?  
Your hair sticks out in every direction  
and won’t lie flat. What causes that?

**Active Reading** As you read this page, circle  
the definitions of *repel* and *attract*. On the next page,  
draw a box around the sentence with the main idea.



Particles with the same charge  
repel, or push away from, one  
another. Particles with opposite  
charges attract one another, or  
pull together.



## Do the Math!

### Positive and Negative Numbers

Fill in the missing squares in the table.

Original charge on an object	Electrons gained or lost	Final charge on the object
+300	Gains 270	
-300	Loses 525	
-270		-500

In the dryer, atoms in clothing gain and lose electrons. Each piece of clothing becomes charged. The positively charged surfaces attract the negatively charged surfaces. As a result, the clothes stick together.

**E**lectric charges can build up on objects. This buildup is **static electricity**. *Static* means "not moving." Objects with opposite electric charges attract each other. Objects with the same charge repel each other.

When you brush your hair, electrons move from each strand of hair to the brush. Soon, all the strands are positively charged. All the strands having the same charge causes them to repel one another and stick out.

A charged object can attract a neutral object. If you rub a balloon on your hair, the balloon picks up extra electrons that give it a negative charge. When you bring the balloon near a wall, electrons in a small part of the wall are repelled and move away, leaving a positive charge at the wall surface. As a result, the balloon sticks to the wall.



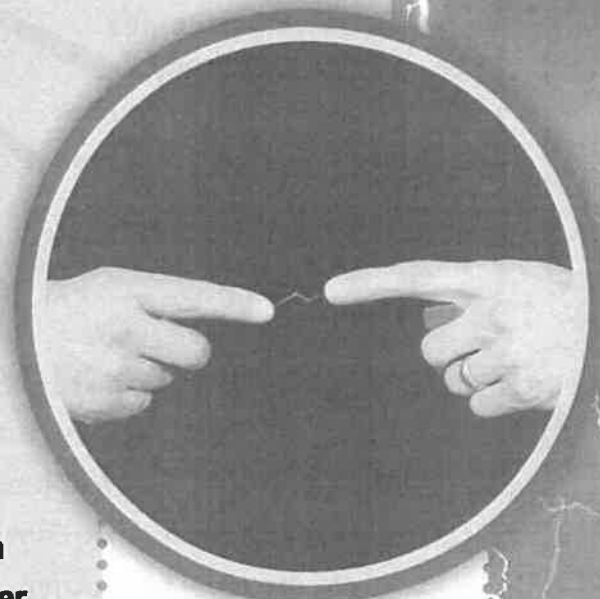
# Lightning Strikes

Thunderstorms can be scary. Lightning can be dangerous. What is lightning? How can you stay safe during a thunderstorm?

**Active Reading** As you read these two pages, underline the main idea on each page.

**S**tatic electricity is a buildup of charges on an object. Charges stay on an object until it comes close to an object that has a different charge.

As you walk across a carpet, electrons move from the carpet to you. Because electrons repel each other, they spread out all over your body. When you touch something, the electrons jump from your finger to the object. This jumping is called an electrostatic discharge. You feel it as a tiny shock.



**Zap! Electrons jump from a person with a negative charge.**

► Complete this cause-and-effect graphic organizer.

Cause: An object with a negative charge is placed near an object with a positive charge.



Effect: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Not all electrostatic discharges cause small shocks. Some result in huge shocks. During a thunderstorm, tiny raindrops or ice particles bump into each other. These collisions cause an electric charge to build in the clouds. Positive charges form at the top of a cloud and on the ground. Negative charges form near the bottom of a cloud.

When the difference in charge between a cloud and the ground is great enough, there is a huge electrostatic discharge that we call lightning. A lightning spark can jump between two clouds, between a cloud and the air, or between a cloud and the ground. The temperature inside a lightning bolt can reach  $27,760^{\circ}\text{C}$  ( $50,000^{\circ}\text{F}$ ), which is hotter than the surface of the sun!

## Lightning Safety

- Stay inside during thunderstorms.
- Turn off electrical appliances and stay away from windows.
- If you can't get inside a safe structure, wait in a car with a metal top for the storm to pass.
- Know the weather forecast. If you will be outside, have a plan in case a thunderstorm develops.

**When lightning strikes, it can catch objects on fire. A tree struck by lightning may split.**

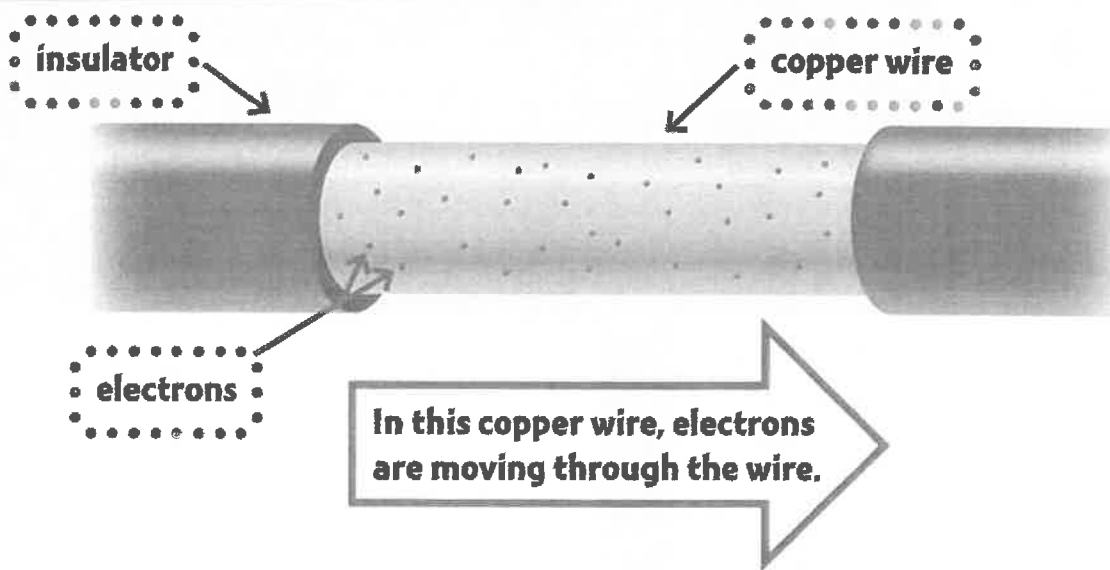
- ▶ Draw a cloud in the sky. Then, draw positive and negative charges to show what causes lightning to form.

# Current Events

Electrostatic discharges may be exciting to watch, but flowing charges are more useful.

**Active Reading** As you read these two pages, draw a box around the sentence that contains the main idea.

**W**hen electric charges have a path to follow, as they do in the wire below, they move in a steady flow. This flow of charges is called an electric current.



**An insulator is a material that resists the flow of electrons. Electric currents can flow easily through a copper wire.**

► What do the blue dots on this wire represent? What is the flow of these blue dots called?

---

---





**Wires connect all of these homes to an energy station.**

You can use an electric current to do many kinds of useful work. We use electric currents for cooking food, lighting a room, and producing sound.

A battery is a source of electric current. Chemical reactions in a battery provide the energy that causes the electrons to flow. Most of the electric current used in schools, homes, and businesses does not come from batteries. Instead, it comes from an electricity generating station, or energy station.

There are many types of energy stations. Energy stations change different types of energy, such as chemical, nuclear, or mechanical energy, into electrical energy. Wires carry the electrical energy from the generating station to every outlet in your home. These wires may be on poles above ground or buried below ground.

**Never climb or play near wires, and never dig in the ground where there are wires.**

► List three devices that use electrical energy from batteries and three that use energy from an energy station.

**Batteries:**

---

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---

**Energy Station:**

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---

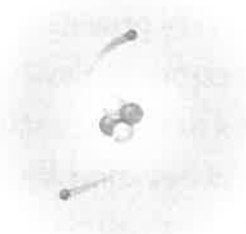
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# Sum It Up!

When you're done, use the answer key to check and revise your work.

The outline below is a summary of the lesson. Complete the outline.

## I. Electric Charges



A. Each of the three types of particles that make up atoms has a different charge.

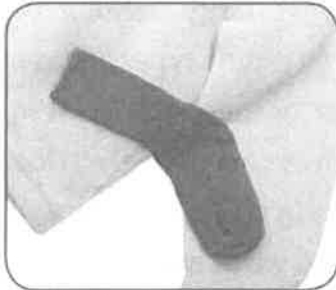
1. Protons have a positive charge.

2. \_\_\_\_\_

3. \_\_\_\_\_

B. Atoms can gain or lose electrons.

## II. Static Electricity



A. Definition: the buildup of electric charge on an object.

B. Objects with charges interact with each other.

1. Like charges repel.

2. \_\_\_\_\_

## III. Electrostatic Discharge



A. Definition: the jumping of electrons from one object to another.

B. Examples

1. Getting shocked after walking across a rug

2. \_\_\_\_\_

## IV. Electric Current



A. Definition: \_\_\_\_\_

B. Sources

1. \_\_\_\_\_

2. Generating stations

Name \_\_\_\_\_

## Word Play

1 Fill in the blank in each sentence. Then, find the words in the blanks in the word search below.

- a. Two positive charges \_\_\_\_\_ each other.
- b. A positive charge and a negative charge \_\_\_\_\_ each other.
- c. The buildup of electric charge on an object is \_\_\_\_\_ electricity.
- d. The flow of electric charges along a path is electric \_\_\_\_\_.
- e. A proton has a \_\_\_\_\_ charge.
- f. A neutron is \_\_\_\_\_ because it has no charge.
- g. An electron has a \_\_\_\_\_ charge.
- h. Electricity is produced at a generating \_\_\_\_\_.

C	N	E	G	A	T	I	V	E
U	F	R	E	P	E	L	R	V
R	I	G	H	T	E	N	I	I
R	N	A	T	T	R	A	C	T
E	G	C	I	T	A	T	S	I
N	E	U	T	R	A	L	L	S
T	I	G	H	T	N	I	N	O
S	T	A	T	I	O	N	G	P

Find the letters you didn't circle in the word search. Write them in order from left to right in the blanks below.

Riddle: What do you call a very scary electrostatic discharge?

\_\_\_\_\_

# Apply Concepts

2

List the three particles that make up an atom. Describe the charge of each particle.

Parts of an Atom	
Particle	Charge

Where are these particles found in an atom?

---

---

3

Explain why the balloons are sticking to this cat.

---

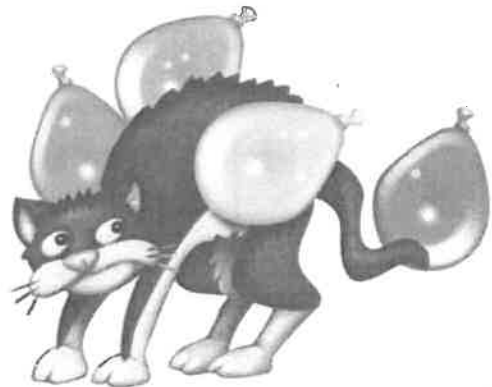
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4

List three ways you can use an electric current. Describe the energy change that takes place.

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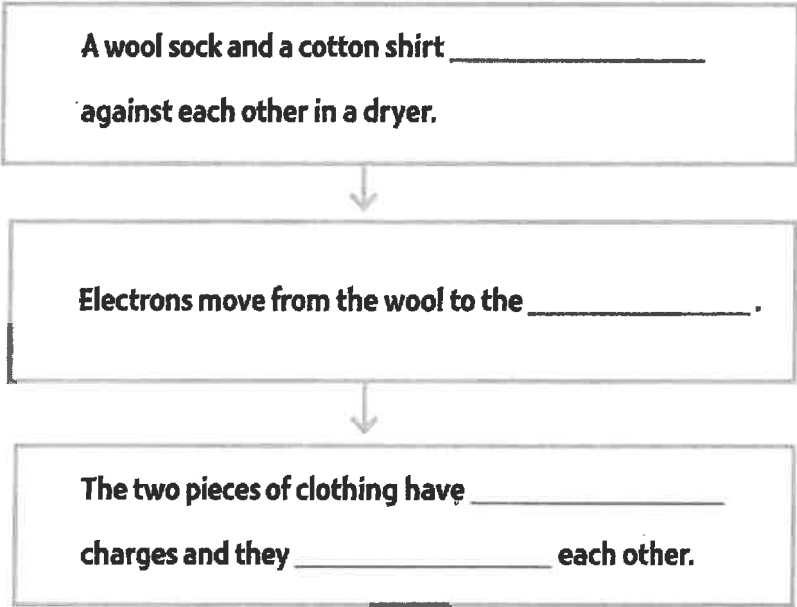
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5 Fill in the blanks to complete the sequence graphic organizer.



6 Explain why the event in the picture takes place.

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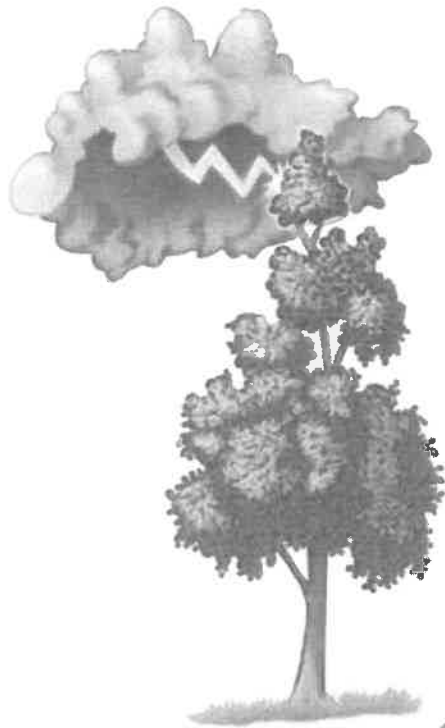
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7

Draw a line from each picture to its description. Circle the pictures that show sources of current used by people every day.

electric current

static  
electricity

electrostatic  
discharge

battery



8

Suppose you are playing soccer at a park, and you hear thunder that sounds far away. Describe some things you should and should not do to stay safe.

---

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---

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---

---



Take It Home!

Do your clothes stick together when they come out of the dryer? If so, how could you prevent this from happening? Use Internet resources to learn how dryer sheets work to reduce static electricity in your clothes.

# Week 4

Question 1:

What is electricity?

Question 2:

How do electric charges interact?

**4<sup>th</sup> grade**

**Language  
Arts**

**Week 4**

**(April 20<sup>th</sup> - April 24<sup>th</sup>)**

**Name:**

**Teacher:**

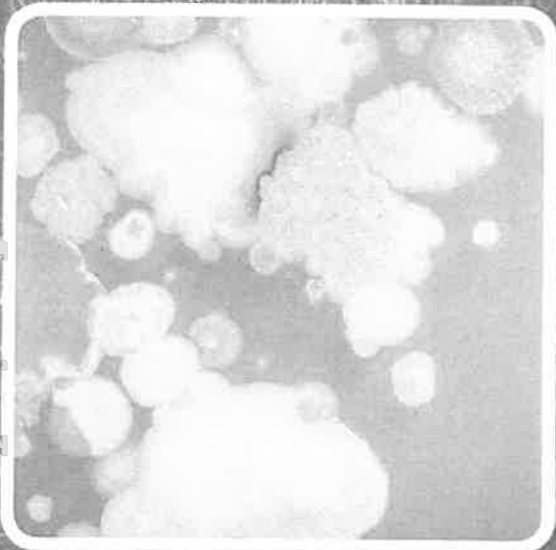




## Weekly Question

What makes an extreme location a place to both protect and explore?

**TURN and TALK** What kinds of extreme environments do you know about? With a partner, make a plan to find answers to your questions in print or digital resources.



**Learning Goal**

I can learn more about informational text by explaining ideas from a text.

**Spotlight on Genre**



**Informational Text**

Authors of **informational texts** use text structure to organize ideas. When reading informational texts, look for:

- **Signal words**, such as *first*, *next*, *because*, *solution*, *such as*, and *like*
- **Topics**
- **Text features**, such as headings and subheadings

Informational texts commonly have one main text structure, but longer or more complex texts may incorporate more than one. Authors choose one or more text structures to support their purpose for writing.

Use text structure to build your understanding!



**TURN and TALK** Think about another informational text you have read. What was its text structure? Use the anchor chart to discuss text structure with a partner. Take notes to reinforce your understanding of how authors use text structure.

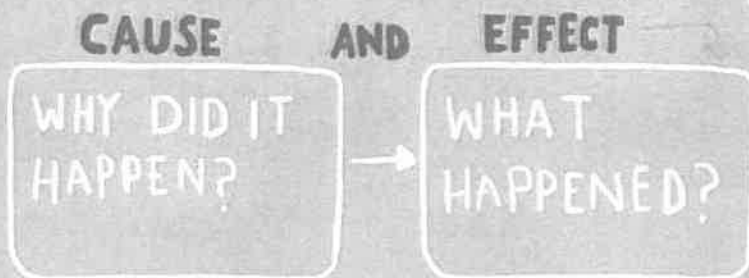
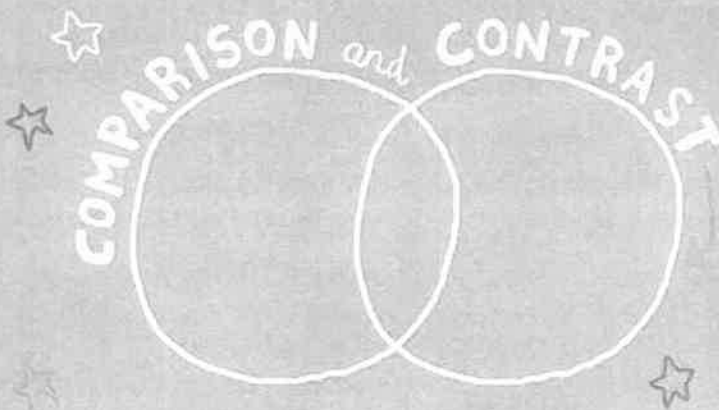
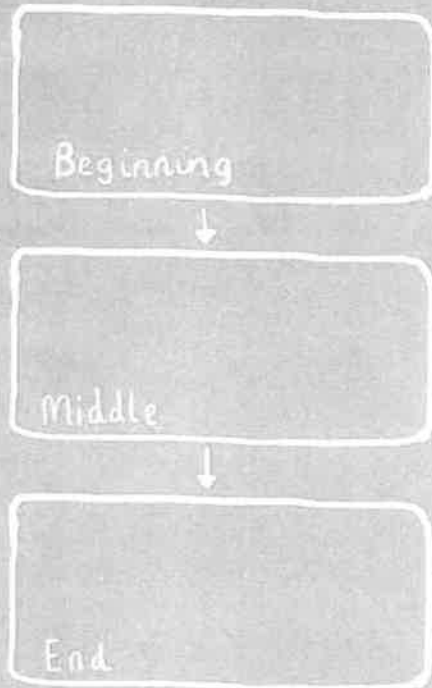
**My NOTES**

# INFORMATIONAL TEXT ANCHOR CHART

Taking Notes on Informational Text Structures

1. Identify the topic.
2. Identify the text structure.
3. Choose a graphic organizer.
4. Evaluate details.

★ SEQUENCE OF EVENTS  
OR Chronological Order



OR PROBLEM AND SOLUTION



**Charles W. Maynard** believes in the importance of wilderness. His more than forty publications include a series of books for young readers about the great mountain ranges of the world and a guide to hiking as a family.

# The Himalayas

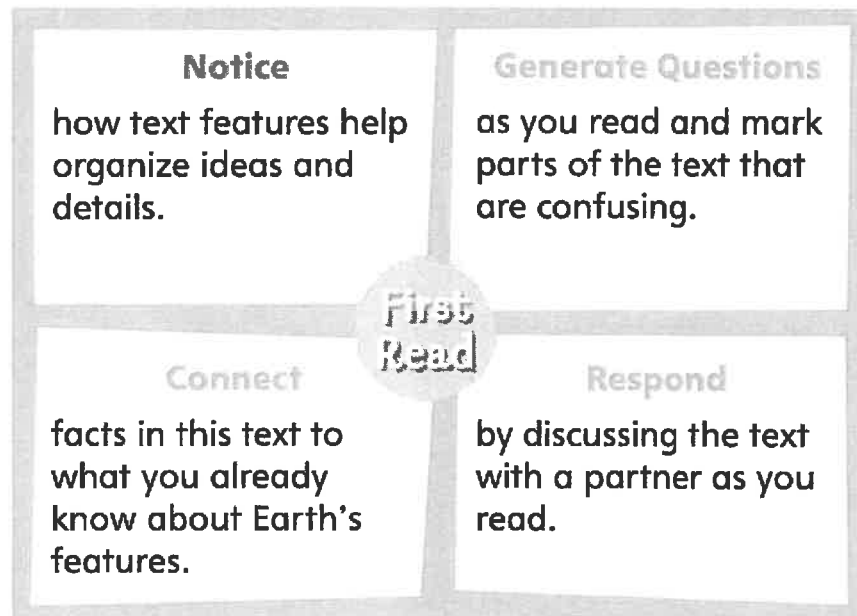
## Preview Vocabulary

As you read *The Himalayas*, pay attention to these vocabulary words. Notice how they help you understand ideas related to Earth's features.

<b>survey</b>	<b>subcontinent</b>	
<b>plateau</b>	<b>altitude</b>	<b>erosion</b>

## Read

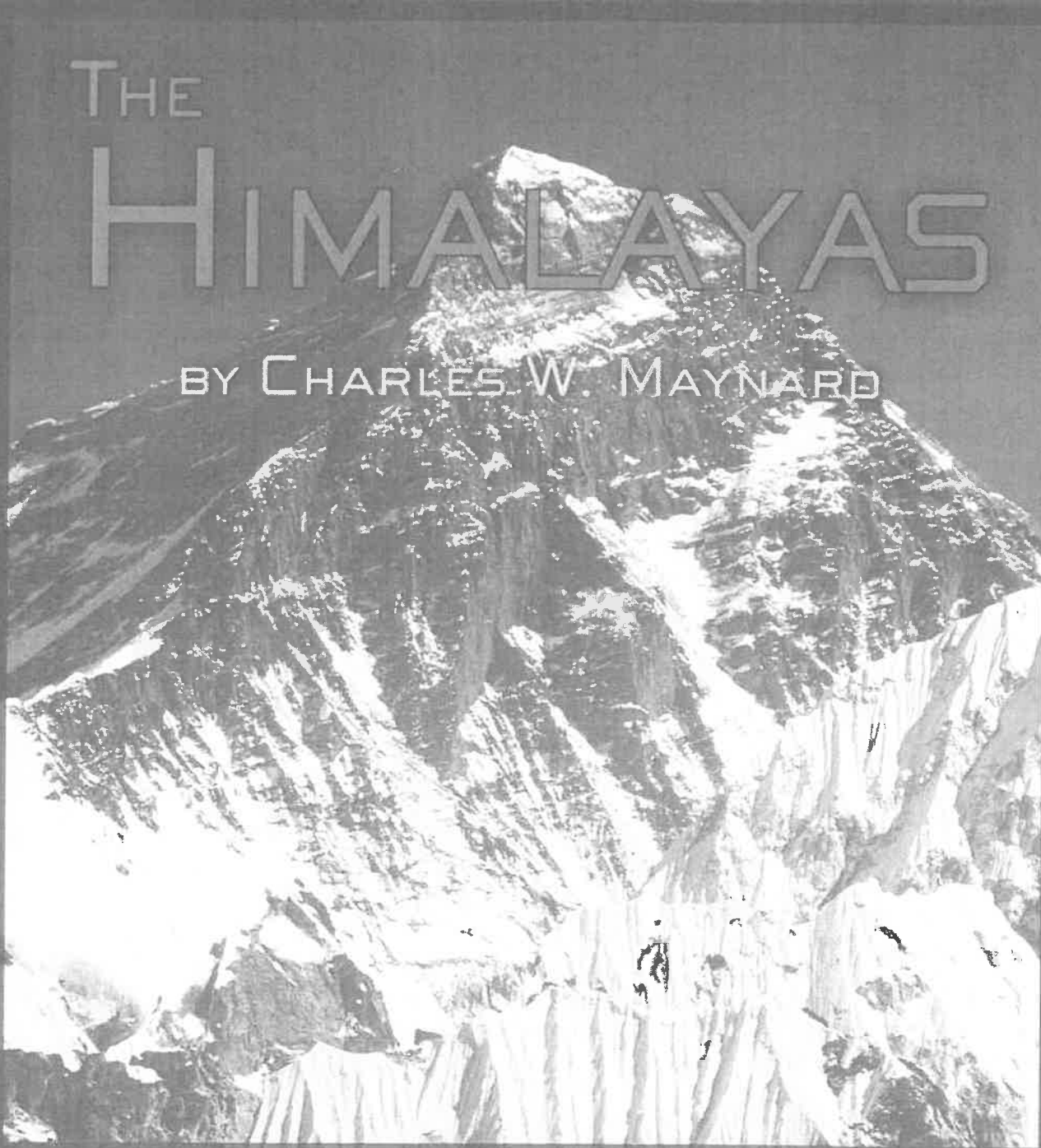
Preview the headings and photographs to establish a “frame” as you read this text. Active readers of **informational texts** follow these strategies when they read a text the first time.





# THE HIMALAYAS

BY CHARLES W. MAYNARD



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AUDIO



ANNOTATE



## CLOSE READ

### Vocabulary in Context

To determine the meaning of an unknown word, look for **context clues** such as restatements or definitions given by Charles W. Maynard.

Underline a context clue that helps you determine the meaning of *abode*.

**survey** measurement of an area of land

## ROOFTOP OF THE WORLD

- 1 The Himalayan mountain range includes the highest peaks in the world. Fourteen of the peaks rise more than 26,247 feet (8,000 m) above sea level. The Himalayas stretch for 1,550 miles (2,494 km) in central Asia. From China's border, they travel through Burma, Nepal, Tibet, and Bhutan, dip south to India, and spread west, ending in Afghanistan. These mountains form the boundaries between many countries on the continent of Asia.
- 2 The highest peak in the Himalayas, and thus in the world, is Mount Everest at 29,028 feet (8,848 m). Mt. Everest, on the border of Nepal and China, is named for Sir George Everest of Great Britain. Everest (1790–1866) led the survey of India from 1830 to 1843.
- 3 The name “Himalaya” comes from Sanskrit words that mean abode, or house, of snow. Sanskrit is an ancient language that was spoken in India. Because the highest mountains on Earth are in the Himalayas, these amazing mountains are also called the Rooftop of the World.

# WHEN CONTINENTS COLLIDE

## CLOSE READ

### Explain Ideas

Underline the result of the movement of tectonic plates that you would include in an explanation of the height of the Himalayas.

**subcontinent** large region that is part of a continent

- 4 The Himalayas are young compared to other mountain ranges in the world. The Himalayas began forming from 60 to 65 million years ago. The Appalachian range in the eastern United States is from 250 to 300 million years old.
- 5 The surface of Earth, called the crust, is made of huge slabs of rock called plates. These plates have moved slowly over millions of years, sometimes bumping into each other. When the plates bump together, the crust is pushed up and it forms mountains. Scientists call the movement of Earth's crust plate tectonics. About 50 million years ago, the Indian subcontinent began to bump into a land mass called Eurasia, which formed Europe and Asia. That event caused part of the Eurasian land mass to wrinkle, forming the Himalayas. These huge wrinkles are called fold mountains.

*The Himalayan mountains are part of the land in many countries, from China to Afghanistan. ►*

## MOUNTAIN

**FACT** EVEN TODAY, THE TECTONIC PLATES ARE STILL MOVING, AND THE HIMALAYAS ARE STILL GROWING. THE HIMALAYAS ARE GETTING TALLER BY ABOUT 1 INCH (2.5 CM) EVERY FIVE YEARS.





*This picture of a huge, snakelike glacier in the Himalayas was taken from the space shuttle Atlantis. ►*



◀ *Over time, this glacier on the Tibet side of Mt. Everest has carved out the large valley shown in this photograph.*

*The Ganges River in India was formed by a glacier, high in the Himalayas. The Ganges is sacred for people of the Hindu religion. ►*





## MOUNTAINS BUILD UP AND WEAR AWAY

- 6 The peaks of the Himalayas were part of the ocean floor millions of years ago. Plate tectonic forces pushed the sea floors into high mountains. Some rocks near the highest peaks of the Himalayas are limestone. Limestone is a kind of rock that is made up of the fossils of sea creatures that lived and died millions of years ago.
- 7 As the Himalayas rise, other forces are working to wear them down. Over millions of years, gigantic glaciers slowly carve large valleys through the high mountains. As the snow and ice of the peaks melt, they form rivers. India's great Ganges River begins in the Himalayas.
- 8 India's and Nepal's great plains lie south of the range. The high Tibetan plateau lies to the north. In between, the Himalayas have three different climate zones. The highest snow-covered peaks lie in the Great Himalayas. The Lesser Himalayas have peaks between 6,000 and 15,000 feet (1,829–4,572 m) tall and are covered with forests and fertile valleys. The lowest, southernmost peaks are the Outer Himalayas. They are called foothills, and they have wide valleys and rivers.

### CLOSE READ

#### Make Inferences

How are the bottoms of oceans and the tops of mountains related? Highlight details you can use to make an inference.

**plateau** large, high, flat area of land

**Explain Ideas**

Underline at least three examples of domain-specific vocabulary you might use to determine and explain the ideas in paragraphs 9 and 10.

**altitude** height or distance above sea level or Earth's surface

**A LAND OF CONTRASTS**

- 9 Wide differences of altitude in the Himalayas create the many climates found there. The valleys of the Outer Himalayas, such as those in India and Burma, are subtropical with hot days and plenty of rain. The valleys of the Lesser Himalayas have a temperate climate. Average summer day temperatures there are from 60°F to 77°F (16°C–25°C). Winters are cooler. The Kathmandu valley of Nepal, in the temperate zone, is populated with many farms and several cities.
- 10 Most of the year's rainfall of 60 inches (152 cm) comes with monsoon winds from June through September. The eastern Himalayas receive more rain. The Himalayas affect the climate of central Asia by blocking cold weather from the north and humid weather from the south. The high Plateau of Tibet, to the north in China, is dry and dusty. The winters there are cold and long.

**MOUNTAIN**

**FACT** THE HIGHEST PEAKS IN THE GREAT HIMALAYAS ARE FROZEN WORLDS. SNOW AND ICE STAY ON THE GROUND YEAR-ROUND. EVEN THE VALLEYS ARE COLD AND DESERTLIKE, WITH NO TREES AND FEW PLANTS. ATOP MT. EVEREST THE OXYGEN IN THE AIR IS ONLY ONE-THIRD OF THAT AT SEA LEVEL. IT IS DIFFICULT FOR PLANTS, ANIMALS, AND HUMANS TO LIVE THERE.

## VARIED VEGETATION

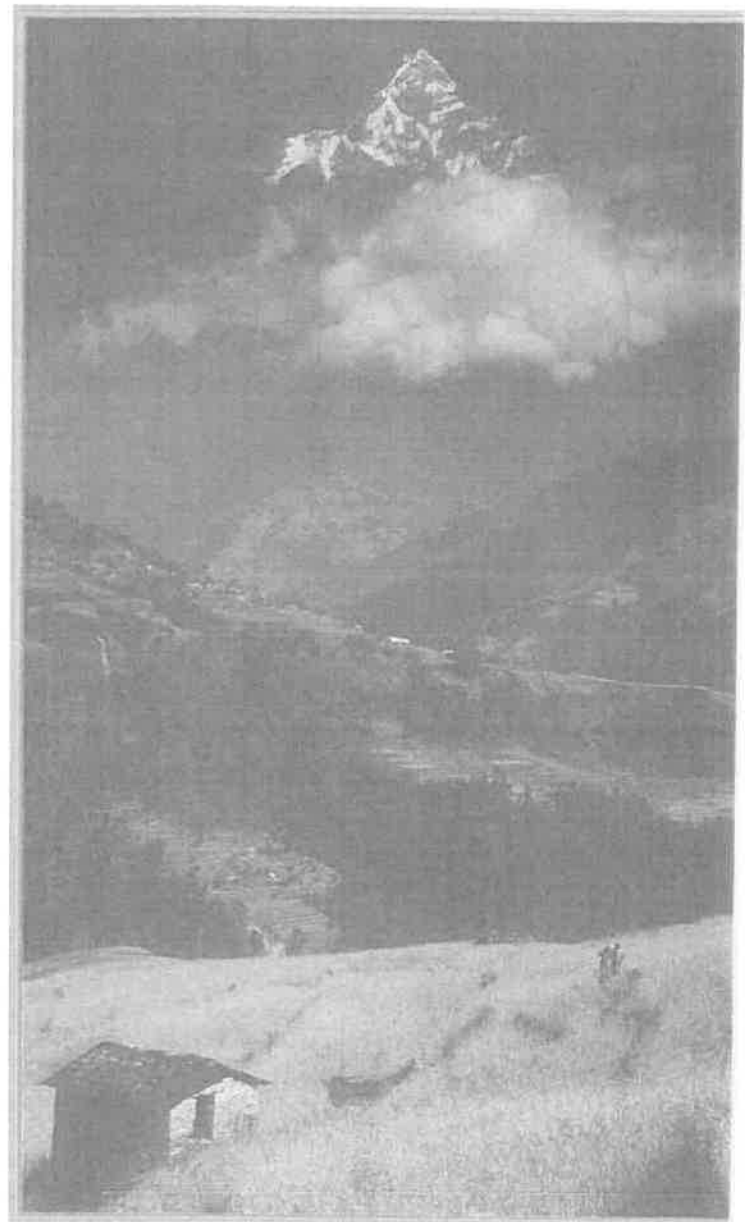
11 The altitudes and climates in the Himalayas support many types of plant life. Rainfall, temperatures, and oxygen all affect the species of trees and plants that live in the mountains and in the valleys. The Outer Himalayas, once covered with a rich, tropical forest, have been harvested. The land is now either farmed or used to graze goats and other livestock. Pine, oak, and poplar trees grow in the Lesser Himalayas. People have cut down many of these trees, which has caused erosion. Tree roots are necessary for keeping soil in place on steep mountainsides. They keep the soil from washing away in rain or blowing away in high winds. Even though many of the steep slopes no longer have trees, beautiful wildflowers color the mountainsides. Orchids, lilies, anemones, poppies, and rhododendron flowers flourish among the mountains and valleys of the Lesser Himalayas. The tree line in the Great Himalayas is about 16,000 feet (4,877 m). Trees will not grow above this level because of the high altitude and the cold.

### CLOSE READ

#### Explain Ideas

Underline details that would allow you to explain key ideas about *erosion* to someone.

**erosion** process of wearing away or breaking down land over time



*The snowcapped peak Annapurna is seen in the distance from this fertile valley in Nepal. ►*

## CLOSE READ

### Make Inferences

Highlight details that support an inference you can make about humans and the animals of the Himalayas.

## AMAZING ANIMALS

- 12 Leopards, tigers, deer, and Indian rhinoceroses were once plentiful in the forests of the Outer Himalayas. When people cut down the trees for lumber, the forests changed and so did the types and numbers of animals that lived in them. Black bears, leopards and other cats, and the muntjac, a deer known for making a barking sound, now live in the few existing forests.
- 13 The Great Himalayas, a land of few people, are home to wolves, snow leopards, small, bushy-tailed marmots, and musk deer. A kind of tiny black spider lives as high as 22,500 feet (6,858 m).
- 14 The yak is a Tibetan ox that lives on high plateaus and in the mountains. It likes the cold, dry climate. People raise yaks to carry heavy loads and to pull carts. Yaks are a source of milk and meat. Yak hair is woven to make rope and cloth, and yak skin is used for leather.

### MOUNTAIN

**FACT** THE WILD YAK IS A HUGE ANIMAL WITH LONG, BROWN-BLACK HAIR FORMING A THICK COAT. MALE YAKS CAN BE 6 ½ FEET (2 M) TALL AT THE SHOULDERS. THEY CAN WEIGH MORE THAN 2,000 POUNDS (907 KG).

*A yak, shown here with a Tibetan family, is a common sight in the Himalayas. ►*

## MANY MOUNTAIN CULTURES

### CLOSE READ

#### Make Inferences

Highlight details you can use to make an inference about climbing the Himalayas.

- 15 About 40 million people live in the Himalayas. The Himalayas pass through the Indian states. The Himalayas also lie in the kingdoms of Nepal and Bhutan, as well as in Tibet.
- 16 Many of the people who live in the southern countries of the Outer Himalayas and Lesser Himalayas are of Indian origin and practice the Hindu religion. North of India, most Tibetan people are Buddhist. Nepal has 35 separate ethnic groups.
- 17 Most people of the Himalayas are farmers who grow fruits and grains and who herd livestock. The Sherpa people live in Nepal's Great Himalayas. The Sherpas are tribespeople who came from Tibet and settled in the steep-sided valleys of the Himalayas. Sherpas are known as the best guides for climbers of these mountains.



## CLOSE READ

### Make Inferences

What inference can you make about the difficulties of climbing and studying the Himalayas?

Highlight details that support your inference.

## ON TOP OF THE WORLD

- 18 The Himalayas were some of the last mountains on Earth to be explored. Ancient spice and silk trade routes between China and India wound through the high mountain passes between India and Tibet. A Spanish priest drew one of the first maps of the area in 1590. In 1852, British surveyors claimed that Peak XV was the highest peak in the world. It was later named Mt. Everest.
- 19 After several attempts, George Mallory and Andrew Irvine set out to climb Mt. Everest on June 8, 1924. They never returned. On May 29, 1953, Tenzing Norgay, a Sherpa, and Edmund Hillary, of New Zealand, became the first to reach Everest's peak. Since then, many climbers who have tried to scale this mountain have died from the freezing temperatures and the low oxygen. However, hundreds have reached Everest's peak, the top of the high Himalayas.

### MOUNTAIN

**FACT** IN 1999, AN EXPEDITION SEARCHED FOR CLUES TO THE 1924 DISAPPEARANCE OF GEORGE MALLORY AND ANDREW IRVINE. THE TEAM FOUND GEORGE MALLORY'S BODY AT MORE THAN 25,000 FEET (7,620 M). AFTER REMOVING A FEW ARTICLES FROM HIS POCKETS, THE TEAM BURIED MALLORY ON THE NORTH FACE OF MT. EVEREST.

*Top: Mallory and Irvine are photographed at the beginning of their attempt to climb Everest. ▼*

*Bottom: A woman climbs a frozen waterfall in the Khumbu range of the Himalayas. ►*



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CLOSE READ

### Explain Ideas


Underline details in paragraph 20 that help you explain why and how the Himalayas are being protected.

## MAPPING AND PROTECTING THE HIMALAYAS

20 One early challenge to exploring the Himalayas was mapping its many high, snow-covered peaks. Today aircraft and satellites make exact maps possible. Geologists, geographers, and other scientists are still working to understand the Rooftop of the World better. Some areas of the Himalayas are being protected by several governments so that endangered plants and animals will be saved. The Sagarmatha National Park of Nepal is one example of this effort. The entire park is located above 9,700 feet (2,957 m).



▲ *Edmund Hillary (left) and Tenzing Norgay (right) were eating breakfast before setting out to climb Mt. Everest.*



The government of Nepal set aside this special place to protect animals, plants, and mountain scenery. The Sherpa people are allowed to live in the national park. Although only a few people will ever climb the mountains, people come from all over the world to look with wonder at these mysterious high peaks and their steep valleys, large glaciers, and swift rivers. The Himalayas remain among Earth's most wonderful places.

## THE ABOMINABLE SNOWMAN

- 21 People who follow the Hindu and Buddhist religions in the Himalayas consider these mountains to be sacred. The Ganges, a sacred river to the Hindu people, begins from the snows of the Himalayas. The mountains were the “abode of the gods” to people who believed that the most powerful gods lived on the snowy peaks.
- 22 The Sherpas and Tibetans tell legends, or tales, about the yeti, who is also known as the Abominable Snowman. It is said that the name “yeti” comes from the Sherpa words *yah*, meaning rock, and *teh*, meaning animal. The yeti is believed to be a large, hairy creature that is bigger and stronger than a human.
- 23 There are no photographs or other proof to show that the yeti lives in the Himalayas. However, stories are told of yeti that attack and kill yaks in the high meadows. The religious beliefs and the stories about the yeti show that many people consider the Himalayas to be special mountains with many mysteries yet to be solved.

### CLOSE READ

#### Explain Ideas

Underline an idea in paragraphs 21–23 that you can explain using details from the text.

## Develop Vocabulary

Concrete words refer to things a person can sense or measure, such as a book. Abstract words name things that cannot be touched, such as ideas. Many concrete nouns can be used in figurative language or as verbs. For example, you can use the noun *pencil* as a verb: I will *pencil* that in on my calendar.

**My TURN** Use each concrete word from the word bank either as a verb or in a figurative or abstract way. You may add an ending to a word you are using as a verb. Then define the word the way you used it.

### Word Bank

survey

subcontinent

plateau

altitude

erosion

1. **Sentence** Bethany surveyed the crowded gymnasium.

**Definition** looked around

2. **Sentence**

**Definition**

3. **Sentence**

**Definition**

4. **Sentence**

**Definition**

5. **Sentence**

**Definition**

## Check for Understanding

**MyTURN** Look back at the text to answer the questions.

1. Is *The Himalayas* informational text or argumentative text? How can you tell?
2. Charles W. Maynard refers to the Himalayas as “young compared to other mountain ranges in the world.” How does this explain the fact that the tallest mountain in the world is in the Himalayas?
3. If you were a scientist, what experiment could you conduct to learn more about the environment of the Himalayas? What question would your experiment answer, and how could you find the answer?
4. How do the photographs and diagrams in *The Himalayas* help explain why people around the world are interested in learning more about these mountains?

## Explain Ideas

Explaining key ideas means making them clear by giving examples and defining vocabulary. You can use specific details from a text to explain ideas, such as what happens and why.

1. **My TURN** Go to the Close Read notes in *The Himalayas* and underline details that help you determine key ideas.
2. **Text Evidence** Imagine that you are being asked to explain ideas based on specific details in the text. Use your evidence to complete the diagram.

To explain	I would include
how the Himalayas are changing today,	the detail that they grow about an inch taller every five years.

## Make Inferences

To make inferences, put evidence from a text together with what you already know to develop a deeper understanding of an idea or a concept.

- 1. MyTURN** Go back to the Close Read notes and highlight evidence that helps you make inferences about the Himalayas.
- 2. Text Evidence** Paraphrase your highlighted text to support an inference about climbing and studying the Great Himalayas. Use evidence to support your understanding of the text.

What I read in the text:

What I already know

My inference about climbing and studying the Great Himalayas

## Reflect and Share

**Write to Sources** The Himalayas are one set of mountains on Earth. Every continent on the planet has mountains that formed due to tectonic forces. Exploring and studying mountains can be dangerous. Why do some people take the risks involved to explore the landforms of Earth? Use evidence from the texts you have read this week to write and support an appropriate response.



**Use Text Evidence** As you gather evidence from your reading, record facts, examples, and quotations on note cards. Then follow these steps.

1. Lay out your notes. Put related ideas in groups.
2. Decide which ideas you want to include in your written response.
3. Put your groups of notes in the order you wish to use for your response.

Write your response, using evidence from your notes to support each idea. Use quotation marks and commas to set off a quote from other words in the sentence.

### Weekly Question

**What makes an extreme location a place to both protect and explore?**

## Academic Vocabulary

### Learning Goal

I can use language to make connections between reading and writing.

**Figurative Language** A simile is a kind of figurative language that compares two unlike things using the word *like* or *as*. You may use similes to draw attention to ideas you want to express. For example, a park ranger might say, “Antelopes flood this valley like boats coming into harbor before a storm.” This simile compares two unlike things, antelopes and boats, and draws attention to how antelopes move.

### Word Bank

umbrella

dandelion

crayons

goldfish

**MyTURN** For each numbered word,

1. **Choose** a word from the word bank.
2. **Write** a sentence with a simile that uses both the numbered academic vocabulary word and the word you chose.
3. **Identify** the idea the simile expresses.

1. label The label “Fluffy” is as scary as a dandelion.

Idea: “Fluffy” is not a scary name.

2. border

Idea:

3. consequences

Idea:



## Prefixes *dis-*, *over-*, *non-*, *under-*

The prefixes *dis-* and *non-* both mean “opposite of.” The prefix *over-* may mean “on top of,” “use more of,” or “too much.” The prefix *under-* may mean “beneath” or “less of.”

Word with Prefix	Meaning Prefix Adds	Meaning of Word
discover	opposite of cover	find
overpower	use more power	defeat
nonfiction	opposite of fiction	factual text
underfoot	below the feet	on the floor

**MyTURN** Read each bold word and write its definition. Then use a prefix to make and define a word that has the opposite definition.

Word	Definition	Make and Define Its Opposite
<b>overcharge</b>	charge too much	undercharge—charge too little
<b>competitive</b>		
<b>agree</b>		
<b>undersize</b>		

## High-Frequency Words

**High-frequency words** are words you will see in many different texts. Read these high-frequency words: *wonder*, *bottom*, *exactly*, *trouble*, *symbols*, *engine*. Try to identify them in your independent reading.

# Week 4, Assignment 1- Informational Text Quiz

Your email address (jamie\_copenace@isd31.net) will be recorded when you submit this form. Not you? [Switch account](#)

\* Required

Name: \*

Your answer

Please read pages 544-545 in your textbook to identify three possible signal words in an informational text. Hint: Use page 544. \*

3 points

- Hooray!
- First
- Dorito
- Because
- Next

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### Week 4 Assignment 2-Vocabulary Preview

Please guess the meaning of each word. Then, use your book (pages 547-559) or a dictionary to write the correct definition in a complete sentence.

Word	My Guess	Correct Definition
Survey (page 548)		
Subcontinent (page 549)		
Plateau (page 551)		
Altitude (page 552)		
Erosion (page 553)		

### Week 4, Assignment 3- Prefix Word Study

## Prefixes *dis-*, *over-*, *non-*, *under-*

The prefixes *dis-* and *non-* both mean "opposite of." The prefix *over-* may mean "on top of," "use more of," or "too much." The prefix *under-* may mean "beneath" or "less of."

<b>Word with Prefix</b>	<b>Meaning Prefix Adds</b>	<b>Meaning of Word</b>
discover	opposite of cover	find
overpower	use more power	defeat
nonfiction	opposite of fiction	factual text
underfoot	below the feet	on the floor

Use the information above to fill in the definition of each word.

<b>Word</b>	<b>Definition</b>	<b>Opposite Word</b>	<b>Definition</b>
Overcharge	Charge too much	Undercharge	
Competitive	Wants to compete	Noncompetitive	
Agree	Think the same	Disagree	
Undersize	Not big enough	Oversize	

## Week 4 Assignment 4 - Making Inferences

Read the following scenario. Use what you already know about life, then search for clues in the text to make an inference about what is happening.

Jake's heart was beating so fast, he felt like it might come right out of his chest. He ascended one step at a time, getting further and further from the ground below.

"You can do it!" his mom yelled.

He glanced over at the lifeguard as he approached the edge of the highest possible platform. She nodded, as if to say, "it's all clear, go ahead!"

He counted to three in his head, closed his eyes, and stepped on the platform. He knew he could do it.

1. Use what you know about life combined with the clues in the text to make an inference. Where was Jake? What was Jake trying to accomplish? Fill in the boxes below.

Clues in Text	+	What I Know	=	Inference

2. How do you think Jake feels after he steps off the platform? How do you know?

3. Write one more clue that could have been included in this scenario to help the reader understand what is happening.



Instructions

Student work

# Week 4, Assignment 5 "The Himalayas" Weekly Story



 **Trisha Richardson** Mar 19 (Edited Mar 19)

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Please read "The Himalayas" on pages 547-559 in your MyView textbook.

## Class comments



Add your comment



### Week 4, Assignment 6 Vocabulary with Nouns and Adjectives

A **noun** is a person, place, or thing and part of a sentence that tells who or what the subject is: student, school, and desk.

An **adjective** is a describing word and part of a sentence that describes the subject: small, funny, and tasty.

**Directions:** Identify the vocabulary words as a noun or an adjective by marking the column with an X then use each vocabulary word in a sentence. Hint: use your Week 4 Assignment 2 definitions for help. Bonus: use an adjective in each sentence!

Vocabulary Word	Noun	Adjective	Sentence
altitude			
erosion			
plateau			
subcontinent			
survey			

# Week 4, Assignment 7- Prefix Word Study

Prefixes Meaning:

dis- and non- both mean "not"

over- can mean "on top of", "more of", or "too much"

under- can mean "beneath" or "less of"

\*Hint: Use page 566 in your myView book.

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\* Required

Name: \*

Your answer

1. James thinks Gaston is an \_\_\_\_\_ because he practices less than he should. \* 1 point

- overachiever
- nonachiever
- underachiever

2. Gophers usually live \_\_\_\_\_ if they can. \* 1 point

- disground
- underground
- nonground





3. Ray is \_\_\_\_\_ so he cannot go to the R-rated movie. \*

1 point

- overage
- underage
- disage

4. Kat could not be trusted because she was \_\_\_\_\_ in the past. \*

1 point

- underhonest
- overhonest
- dishonest

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### **Week 4, Assignment 8- Explaining Ideas**

Explaining key ideas means making them clear by giving examples and defining vocabulary.

Imagine you are being asked to explain ideas based on specific details in the text. Use text evidence and examples to complete the chart:

<b>To Explain:</b>	<b>I Would Include:</b>
How the himalayas are changing today,	The detail that they grow about an inch taller every 5 years.
Climates on the Himalayas,	
Erosion,	
How endangered plants and animals are being protected,	

## Vocabulary

**Directions: Choose the word or word group that has about the same meaning as the underlined word.**

1 George Washington took part in a survey of land in the 1700s.

- A farming
- B measurement
- C purchase
- D sale

2 India is a subcontinent.

- F second continent
- G large island nation
- H land that borders a continent
- J large region that is part of a continent

3 The cattle grazed on the plateau.

- A river valley
- B beach near a lake
- C large, high area of flat land
- D top of a long mountain range

4 I get short of breath at that altitude.

- F depth
- G height
- H climate
- J temperature

**Directions: Read the question. Then choose the best answer.**

5 Which word group is a synonym for erosion in the sentence below?

*The large waves caused erosion next to the coastal highway.*

- A a slippery spot
- B a different climate
- C process of wearing away land
- D creation of deep pools of water

## Word Study

**Directions:** Choose the word below that has the meaning of the boldfaced definition.

**6 knock out of position**

- F disappoint
- G discover
- H dislodge
- J dispense

**7 something that has been prepared too much**

- A overcharge
- B overdone
- C oversize
- D overpower

**8 a flight that goes directly from one airport to another**

- F noncompetitive
- G nonfiction
- H nonsense
- J nonstop

**9 plants and shrubs that sprout below larger trees**

- A undergrowth
- B understate
- C undersize
- D underfoot

**Directions:** Read the question. Then choose the best answer.

**10** The word that is a synonym for the word messy is —

- F disagreed
- G disbelieved
- H disobedient
- J disorganized

## Reading Comprehension

Directions: Read the selection. Then answer each question.

### Faraway Antarctica

- 1 Antarctica is a continent that seems very far away. That's because for most people, it is. Antarctica is an uninhabited place, or a place where people do not live. Although Antarctica is frozen, it is extraordinary. It is a region that is important to scientists who want to understand how the world works.
- 2 Antarctica is the home of the Antarctic Ice Sheet. This huge sheet of ice covers millions of square kilometers. About 60 percent of the freshwater on the planet is frozen in the Antarctic Ice Sheet. The extremely cold temperatures in Antarctica help to keep this ice sheet frozen solid.
- 3 Antarctica stays cold all year long. Even in the summer, the temperatures are almost always below freezing. The snow and ice on top of the Antarctic Ice Sheet don't melt. Instead, the snow and ice build up each year. That's what makes the ice sheet so thick and large.
- 4 Farther from the center of Antarctica, there are ice shelves and sea ice. Ice shelves are where seawater and ice come together. Since they are closer to seawater, they melt and freeze at different times in the year. Sea ice is a frozen part of the seawater around Antarctica. When this seawater freezes in the winter, Antarctica almost doubles in size.
- 5 Scientists have been studying Antarctica for many years. They have been able to learn about how people's actions affect the planet. In 1985, scientists discovered a hole in the ozone layer high above Antarctica. Since then, people have learned more about how humans affect Earth's atmosphere. This faraway continent helps us understand how people's actions in one part of the world can affect places around the planet.

- 11 Which detail best explains what an ice shelf is?
- A Snow that does not melt in Antarctica
  - B The place where seawater and ice come together
  - C Large floating chunks of ice in the waters near Antarctica
  - D A huge sheet of ice that covers millions of square kilometers
- 12 Which detail from the selection explains why studying Antarctica helps scientists learn more about how humans impact the environment?
- F *About 60 percent of the freshwater on the planet is frozen in the Antarctic Ice Sheet.*
  - G *Even in the summer, the temperatures are almost always below freezing.*
  - H *Scientists have been studying Antarctica for many years.*
  - J *In 1985, scientists discovered a hole in the ozone layer high above Antarctica.*
- 13 Which sentence from the selection best shows why it is difficult to state the exact size of Antarctica?
- A *This huge sheet of ice covers millions of square kilometers.*
  - B *The snow and ice on top of the Antarctic Ice Sheet don't melt.*
  - C *When this seawater freezes in the winter, Antarctica almost doubles in size.*
  - D *This faraway continent helps us understand how people's actions in one part of the world can affect places around the planet.*

# WEEK 4: WRITING

April 20 - April 24

# DAY 1:

**Write a minimum of 5 complete sentences.**

Tell about your dream vacation.



# DAY 2:

**Write a minimum of 5 complete sentences.**

Book Title:

Summarize what you have read today.

# DAY 3:

**Write a minimum of 5 complete sentences.**

Who is one of the most important people in your life? Describe the person and why they are important.

# DAY 4:

**Write a minimum of 5 complete sentences.**

What do you think is better; a roller coaster or a water slide? If we could have one at Gene Dillon, which would you choose and why?

# DAY 5:

**Write a minimum of 5 complete sentences.**

If you could have a super power, what would it be? Why would you choose that power and what would you do with it?