



At Home Learning Resources

Grade 3 - Week 9

Content	Time Suggestions
Literacy Instruction (Watch a mini lesson, and/or complete online learning)	10-20 minutes daily
Reading (Read books, watch books read aloud, listen to a book)	At least 20 minutes daily (Could be about science, social studies, etc)
Writing or Word Work or Phonics/Vocabulary	20-30 minutes daily
Math	30 minutes daily
Science	45 minutes per week
Social Studies	30 minutes per week
Arts, Physical Education, or Social Emotional Learning	30 minutes daily

These are some time recommendations for each subject.
We know everyone's schedule is different, so do what you can.
These times do not need to be in a row/in order,
but can be spread throughout the day.

Grade 3 ELA Week 9

Your child can complete any of the activities in weeks 1-8. These can be found on the Lowell Public Schools website: <https://www.lowell.k12.ma.us/site/Default.aspx?PageID=3799> Activities in weeks 7 & 8 are focused on nonfiction reading and writing and may have resources you can continue to use in Week 9.

This week completes the focus on informational or nonfiction reading and speech writing. Your child should be reading, writing, talking and writing about reading, and working on learning new vocabulary in their reading.

Reading: Students need to read each day. They can read the articles included in this packet and/or read any of the nonfiction/informational books that they have at home, or can access online at Epic Books, Tumblebooks, Raz Kids, or other online books. All resources are on the LPS website. There is something for everyone.

Talking and Writing about Reading: As students are reading, they can think about their reading, then talk about their reading with a family member and/or write about their reading using the prompts/questions included.

Writing: Students will finish working on speeches this week. The resources in this packet are the same as the last two weeks. These resources are charts with examples to help your child write. They are available online in an interactive form with video tutorials here: [Grade 3 Speech Writing Choice Board](#). Click on the images to watch the video tutorials. This writing should happen over multiple days. Students will be planning their writing, then writing, then making it even better by revising, writing some more, and at the end, fixing it up by editing. Your child might write 1 speech and work to refine it throughout, or might write multiple speeches, getting better each time. As the unit ends, your child can deliver their speech to a live audience or record it to share with friends, family, or your child's teacher.

Word Work: Students can work on learning new vocabulary. Students will use clues in the reading and think about what the word might mean. Students can look up words and help them make sense of the new vocabulary. Encourage students to use their new words in conversation.

As you read the texts, stop and jot the facts and opinions in each text. Then write about how your thinking is changing as you learn new information or hear different opinions and reasons.

Facts	Opinions	Changes in Thinking

R U 2 Plugged In?

by Joe Bubar



©Hero Images/Getty Images

American kids, on average, spend nearly seven hours a day staring at screens. Find out what effects that can have.

On a typical day, 9-year-old Leslie Santos spends hours after school playing games on her iPad or watching videos on her laptop. She also regularly does her homework while watching her favorite TV shows. The fourth-grader from Los Angeles, California, says she can't imagine her life without these screens.

"I would be bored all day," Leslie says.

Words to Know

moderation (mod-uhr-AY-shuhn) *noun*. a reasonable limit or amount

excessive (ek-SEHS-ihv) *adjective*. more than is necessary or normal

Countless other kids in the U.S. also spend much of their free time plugged in to devices with screens. That has many adults worried that screens may be taking over kids' lives.

Screen Overload

Computers, TVs, video-game systems, smartphones—in today's world, it's nearly impossible to avoid screens. In many ways, they make our lives easier. Phones and computers connect us with friends or help us do research for school. In fact, some health experts say relaxing by watching TV or playing *Candy Crush Saga* is fine in **moderation**.

The problem is that many kids spend a lot more time on these devices than they should. The American Academy of Pediatrics (AAP) recommends that kids limit their screen time to no more than two hours a day. But on average, American kids spend about seven hours a day in front of screens.

According to the AAP, all that extra screen time can be bad for your health. Some experts think kids who use screens for **excessive** amounts of time can even become addicted to them.

Digital Distractions

Being surrounded by screens can make it hard to focus on one task. In a study last year, researchers

in California observed students as they did their homework.

After just two minutes, many kids started surfing the Internet, watching TV, or texting instead of focusing on their work.

Experts say that using a lot of digital devices allows you to do many things at once—but none of them well.

“Switching between tasks takes up brainpower,” says Dr. Victoria Dunckley. She is a doctor who helps many young people who are struggling with controlling their screen time. “So not only does it take you longer to get the task done, but you do the task with less accuracy,” she says.

Screens are such a big part of many kids’ lives that they have a hard time shutting down at night. Studies have shown that using digital devices right before bedtime can keep you tossing and turning all night.

“Even small amounts of technology use after sundown tricks the brain into thinking

it’s daytime and impacts sleep,” Dunckley explains.

She adds that it’s important to take plenty of screen breaks to allow the brain to rest during the day too. Dunckley suggests that kids use that extra time to be more physically active and to communicate face-to-face with one another instead.

Powering Down

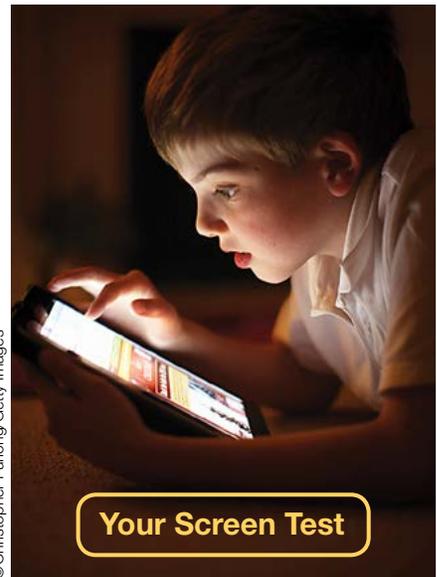
How long could you go without screens? Kids across the country will find out May 5 to 11 during Screen-Free Week. For this event, people pledge to go seven days without any screens they use for entertainment.

Jackson Elementary School in Manitowoc, Wisconsin, held its own screen-free week earlier this year. Sixth-grader Sammie Fidler says that disconnecting from all her digital devices had a lot of benefits.

“I found that I have more connections with my family if I’m not using electronics,” Sammie says.



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Your Screen Test

When does watching TV or videos online stop being OK and start becoming a problem? Ask yourself these questions:

Do you feel as if you need to use screens as soon as you wake up or while you’re in bed at night?

Yes No

Do you find screen-free activities, such as playing outside, boring?

Yes No

Do you get mad, annoyed, or depressed when your parents take away your screens?

Yes No

Do you use screens when you’re supposed to be doing your homework or chores?

Yes No

Do you ever hide your screen use from your parents or lie about using screens so you can keep playing a game?

Yes No

If you answered “Yes” to all or most of these questions, experts say it’s time to cut down on your screen time.

As you read the texts, stop and jot the facts and opinions in each text. Then write about how your thinking is changing as you learn new information or hear different opinions and reasons.

Facts	Opinions	Changes in Thinking

The Case Against Soda

Soda. Pop. Soda pop. Whatever you call it, those sugary, fizzy drinks that the world has come to love are not very good for you. Why not?

First, they can cause you to put on the pounds. A typical can of soda (sixteen ounces) contains 207 calories. Drinks are often forgotten as a calorie source, and it's easy to get 500 calories a day from a couple of cans of soda. That's around one fourth of your daily caloric needs that you don't even notice! And that doesn't give you any nutrition.

Then, they're bad for your teeth. Sugar is known to cause tooth decay. So the more soda you drink, the more likely you'll be spending a lot of quality time with your dentist.

If that's not enough, there are hidden dangers. Soda contains something called phosphoric acid—that's what makes it fizzy. Too much phosphoric acid can cause an imbalance of the minerals calcium



and phosphorus in your body. That imbalance is bad for the growth and strength of your bones.

How are kids to make good decisions about what to drink when the soda companies pay their schools to put soda machines right in the hall? That practice may be coming to an end! Several states have passed laws limiting or eliminating vending machines in schools.

Like everything related to food and drink, moderation is best. Having a soda now and then isn't going to hurt you! But several cans of soda every day is not good for your health. ■

Influential Advertising

Have you ever stopped to think how many places you see advertisements for products to buy, places to visit, or movies to see? Sure, there are plenty of commercials interrupting your favorite TV shows, but you probably don't realize how many other ads you see. Advertising is everywhere, on posters, in our mail, on the Internet, even on the sides of busses.

But how does advertising influence us? For one thing, ads make certain products very familiar by showing them to us again and again. For example, there are many brands of soda on the shelves, but if you ask people to name the first two brands that come to mind, 90 percent of them will say Coke and Pepsi, in either order. Why? Because those two companies have spent the most money putting their products in front of us for many years.

Advertisers also influence how we think by giving us reasons to buy their products. For example, an ad's message may be that if you buy a certain product you will look better, smell better, be more fashionable, be more popular, have less to worry about, or have more fun. This may or may not be true, but if the ad makes you think that the product will



Advertising abounds on this busy street corner.

© Corbis

be good for you in some way, then it has influenced you.

Sometimes advertising can influence us in positive ways. You might learn about new foods that are healthy or about new timesaving technology. You could discover a great place to go on vacation or be influenced to give money to the Red Cross.

Advertising also influences people in negative ways. Beer commercials have led many teens to think it's okay to start drinking alcohol, which is both illegal and dangerous. Advertising also influences people to buy things that they don't really need and cannot afford.

Companies need to advertise to let us know about their products and services. However, we need to make smart decisions and not be influenced too easily by the commercials and print ads we see every day. ■

Use these anchor charts and planning tools to help you write your own speeches. There are a couple of examples to help you too. Watch some kids, just like you deliver their speeches.

Plan before you write!

write a thesis.
 People should be...
 Teachers and kids should think...
 when I see...
 ...I should say...

Gather reasons and evidence to support your thesis...
 EXAMPLES DETAILS FACTS

How to write a Persuasive Speech
 Hey World, Listen Up!

Consider your audience.
 You should...
 You should...

Is My Speech Easy to Read?

Deliver your speech!

...Collect information about the problem and solution.

Opinion writers plan before they write.
 First they develop an Idea!

Develop an Idea by...

...seeing a problem and imagining a solution.

What problems and solutions do you see? Make a list!

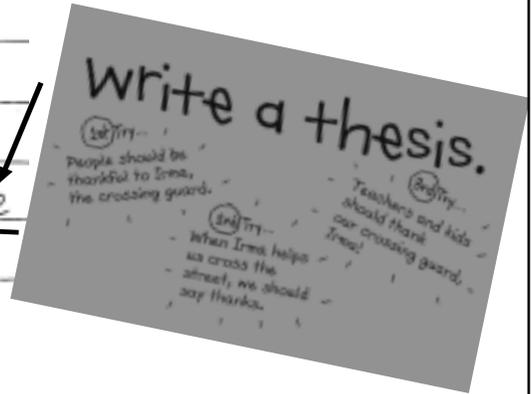
Things I could write my speech about:

- + Put your dishes in the sink
- + Don't leave your legs on the ground
- + Pick up your gloves / put gloves in the trash
- + Don't play your music so loud
- + Be kind to your brother
- + Why doing schoolwork is important
- + staying home
- + wash your hands
- + thank your mail / amazon / trash / nurse people

Changes I want to see in this school

- no bullying
- no littering
- kids following directions
- homework passes
- more books in the library
- more yard tools
- better movies
- jump ropes
- better wash
- people
- better cleaner

Are you starving during lunch? Do you think you'll be stomachless when you come home from school? If you are then you're with me. We need more food during lunch.



**Write a thesis (claim).
Try it out different ways!**

Have you ever seen garbage in the compost bin? Or ever seen the garden not growing good. Well I think our school should compost better at lunch. One reason is... I think a lot of people don't know what goes in and what doesn't.

By Gardening!
Do you have a garden? If you don't you should make one. That's what I want to share with you that you should save the environment by gardening. It's simple but it makes a

Gather reasons and evidence to support your thesis...

EXAMPLES DETAILS FACTS

You could plan using boxes and bullets

and that's definit... first reason is that you won't get hurt with all of your gear on because once I was playing someone tackled me I didn't feel anything at all.

All of your gear is thick and strong for example usually all of your gear is 2 inch which is thick and strong.

Another reason is that it's exciting and fun for example it's exciting and fun because you have to do all ~~the~~ awesome special moves that make it really exciting and fun. Another example is you have to run and make moves which makes it ~~easy~~ and a pumped up game.

- For example ...
- Another example is ...
- This is a problem because ...
- This is important because ...
- This makes me think ...
- This connects with ...

You could plan across pages in a booklet.

Bullying hurts kids. Some kids feel bad for a long time. For example, my friend Ryan still feels bad because some kids told him he is bad at basketball and that was last year! And lots of kids get bullied. In 2007 a third of fourth to eighth graders who were asked said they were bullied. I learned this from the article "Battling Bullies." Some kids even said they missed school because they were bullied. This needs to STOP.

Use Boxes and Bullets to plan your writing.
Then Put it All together.

Thesis (Claim):

Reason #1:

Reason #2:

Reason #3:

Claim

Reason 1

(One reason we need this change is...)
(One reason this is a problem is...)

Reason 2

(Another reason...)

Reason 3

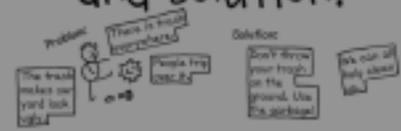
Solution

(Here are some ideas to help...)

Plan your writing across the
pages. Then put it all
together.

You can take out the Not so yummy meals And fill them in with something yummy. I think this solution will get kids to eat these lunch and help them make healthy choices. This is the food that is yummy and can stay.

...Collect information about the problem and solution.



I have some ideas for how to stop bullying. One idea is that we can look at yard and see if we see anyone being bullied and if we do, we can get a friend or two friends and go over to stand next to the kid being bullied and say "NO!" to the bully. Maybe you are scared to stand up to bullies. I can understand that. It can be scary. But think about how important it is to stop other kids from getting hurt. You could save a kid from getting teased and picked on. Then you'd be a hero! And if bullies don't stop bullying, they should get in trouble.

Consider your audience.



Speech writers consider who their audience is and talk directly to their audience.

Are you like me? Do you believe we should take care of the earth? Do you believe in recycling? Because if you do, then you will agree that we should recycle better at our school. Our problem is that we have bins for recycling but they aren't used well. We need to get a better system going so kids use the recycling bins well.

WAYS TO DIRECTLY ADDRESS YOUR AUDIENCE

- Name and talk back to the worries or concerns the reader might have about the writer's idea
 - * I know you might be thinking/worrying/feeling ...
 - * If you are wondering/worrying/asking ...
 - Let me explain:
 - * You might wonder/ask/judge ...
 - * WHAT? you might be thinking
- Ask questions the reader might have that you have too
 - Have you ever ...
 - Do you wonder ...
 - Why ...
 - What about ...

Is My Speech Easy to Read?

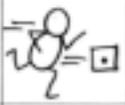


Use a checklist!

1. ✓ Do I include end punctuation?



2. ✓ Do I check that I don't have run-on sentences?



3. ✓ When I read the text to myself, does it make sense, seem smooth?



4. ✓ Do I use paragraphs to help me to leave white spaces in my speech?



Don't Drink Bottled Water by Robert

We need to stop drinking bottled water that comes in plastic water bottles! Instead we need to carry water bottles with us, and just refill those water bottles when the water runs out. Plastic water bottles are not good!

One reason we need to stop using plastic water bottles is because they are not good for the earth. Plastic is bad news. It can't break down or go back into the ground. If we use plastic and throw it away, then it just stays there. But I have seen lots of plastic water bottles in cans for regular garbage!

Another reason we need to stop using plastic water bottles is because they take up too much room in the recycling bin. Recycling is good, but the bins get too full with the plastic bottles. There is no room for paper or other things.

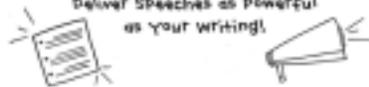
I interviewed Grace, a third-grader. She said, "I see plastic water bottles everywhere. They are at my gymnasiums class, and at the park, and they are all over school, too. Plastic water bottles are on almost every teacher's desk. When there are parades in town, or Halloween celebrations or anything like that, people leave water bottles all over the place."

I also talked to my mom. She said, "Using plastic is just not good for the earth." She said at her office she has a water fountain that people can use to fill their own water bottles, and it even says how many plastic bottles of water the fountain has stopped people from using. I think we should have a fountain like that here.

So, please get yourself a reusable water bottle and carry it with you. You can refill it. Stop using plastic bottles. It will be better for the earth. Thank you!

Deliver your speech!

Deliver Speeches as Powerful as Your Writing!



• Look at the audience during some parts



• Stand tall and confident



• Pauses after sentences and paragraphs



• Use gestures



• Speak in loud, confident voices



Use the Recycling Bins Better!

Are you like me? Do you believe we should take care of the earth? Do you believe in recycling? Because if you do, then you will agree that we should recycle better at our school. Our problem is that we have bins for recycling but they aren't used well. We need to get a better system going so kids use the recycling bins well.

One reason this is a problem is that the recycling bins are a mess. We see candy wrappers, banana peels, and tissues in these bins, along with the paper. Also I have seen paper with staples. None of these things belong there.

Another reason we need to do a better job is because we don't know what to recycle. I have heard kids asking, "Does this go in there?" I have thought that too. Last week, I saw a kid drop a whole armful of stuff in the recycling bin at the end of the hall. She looked at some stuff but then just shrugged and dropped it all in. I think maybe she wasn't sure what could go in.

I interviewed Pamela, a third-grader at the school. She said, "I always see stuff that doesn't belong in our recycling bin. I think it's a big problem. I don't know what goes in there. Like I'm not sure about Post-its."

We need to do a better job of recycling. Here are my ideas for how we can do a better job. We can ask the custodians what can go in the bins and make signs. We can make announcements at lunch and during the morning announcements about what can go in the recycling bins. We can even have an assembly about recycling. The custodians said they would help us.

My mom said recycling is important for the earth. Recycling is reusing things so we don't waste them. We need to do a better job at our school! We can all help. You can check that what you put in the recycling bin is okay to recycle and take stuff out that doesn't belong. This is important. Please help!!!

Don't Drink Bottled Water

by Robert

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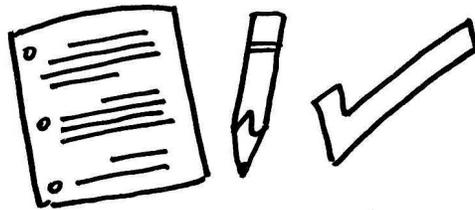
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I also talked to my mom. She said, "Using plastic is just not good for the earth." She said at her office she has a water fountain that people can use to fill their own water bottles, and it even says how many plastic bottles of water the fountain has stopped people from using. I think we should have a fountain like that here.

So, please get yourself a reusable water bottle and carry it with you. You can refill it. Stop using plastic bottles. It will be better for the earth. Thank you!

Is My Speech Easy to Read?



<p>✓ Do I include end punctuation?</p>	Three small square boxes arranged horizontally. The first box contains a period (.), the second contains an exclamation point (!), and the third contains a question mark (?).
<p>✓ Do I check that I don't have run-on sentences?</p>	A stick figure is shown in profile, running quickly towards a small square box that contains a period (.), representing a run-on sentence.
<p>✓ When I read the text to myself, does it make sense, seem smooth?</p>	A stick figure is sitting and reading a document. Above their head is a thought bubble containing a checkmark, indicating that the text makes sense and seems smooth.
<p>✓ Do I use paragraphs to help me to leave white spaces in my speech?</p>	A document with several horizontal lines representing text. There are clear gaps between the lines, representing the use of paragraphs to create white space.

When students encounter an unfamiliar word in their reading, they can use the sentence the word is in to try to figure it out. Use this vocabulary sheet when you find a new word. You might need more than one as you are reading different texts.

A new and interesting word:	Words in the book that helped me understand the new word:
A place in the book that helped me understand the new word: (page or pages and tell why)	
What I think the new word means:	
Dictionary definition:	
My sentence with the new word:	

Application Problem #1



Solve the story problems below.

- A. Mr. Bee bought 3 jars of honey, which weighed a total of 24 ounces. If all the jars weigh the same amount, how much did each jar weigh? Sketch the story and solve.
- B. Mrs. Bee also bought 24 ounces of honey. She put 3 ounces of honey into several small jars. How many jars did she use? Sketch the story and solve.
- C. How are the problems similar?
- D. How are the problems different?

Application Problem #2

Directions: Read each problem. Select and record all equations from the equation bank which could be used to solve the problem.

Dan made 2 trays of brownies. Each tray has 8 brownies. How many brownies does Dan have?

A teacher bought 2 boxes of pencils. Each box holds the same number of pencils. If the teacher bought a total of 8 pencils, how many pencils are in each box?

Sally plants 8 bushes in rows of 2. How many rows will there be?

Ned needs to buy 8 balloons. They come in packs of 2. How many packs does he need?

Fred can run around the baseball field in 2 minutes. How long will it take him to run around the field 8 times?

A YouTube video lasts 2 minutes. How many videos can Sam watch in 8 minutes?

Equation Bank

$$2 \times 8 = N$$

$$8 \times 2 = N$$

$$2 \times N = 8$$

$$N \times 2 = 8$$

$$N \div 2 = 8$$

$$N \div 8 = 2$$

$$8 \div N = 2$$

$$8 \div 2 = N$$

Computation Problem #1

True or False

Determine if each statement is True or False and place an X in the appropriate column.

	True	False
1) 9×7 is equal to 52.	<input type="checkbox"/>	<input type="checkbox"/>
2) 4×6 is greater than 5×5 .	<input type="checkbox"/>	<input type="checkbox"/>
3) 3×4 is equal to 6×2 .	<input type="checkbox"/>	<input type="checkbox"/>
4) 8×6 is less than 9×5 .	<input type="checkbox"/>	<input type="checkbox"/>
5) 92 is equal to 9×10 .	<input type="checkbox"/>	<input type="checkbox"/>
6) 8×9 is greater than 10×7 .	<input type="checkbox"/>	<input type="checkbox"/>
7) 3×6 is less than 4×5 .	<input type="checkbox"/>	<input type="checkbox"/>
8) 8×7 is equal to 7×8 .	<input type="checkbox"/>	<input type="checkbox"/>
9) 42 is less than 6×7 .	<input type="checkbox"/>	<input type="checkbox"/>
10) 2×2 is greater than 1×4 .	<input type="checkbox"/>	<input type="checkbox"/>

Computation Problem #1 cont.

Complete each equation by placing $<$, $>$, or $=$ in the box.

- 1) 10×1 3×3
- 2) 8×2 4×3
- 3) 7×1 1×7
- 4) 5×9 6×8
- 5) 10×3 4×8
- 6) 7×9 6×10
- 7) 3×4 2×6
- 8) 5×7 6×6
- 9) 1×6 2×3
- 10) 3×5 2×7
- 11) 1×3 2×1
- 12) 4×1 1×4
- 13) 6×4 9×2
- 14) 5×10 6×8
- 15) 9×1 2×4

Computation Problem #2

Use the digits 0-9 just one time. Write them in the boxes below to make each multiplication problem correct.

0 1 2 3 4 5 6 7 8 9

$$\begin{array}{r} \square \\ \times 6 \\ \hline 36 \end{array}$$

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

$$\begin{array}{r} \square \\ \times 4 \\ \hline 2\square \end{array}$$

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

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

Determine what number correctly answers both equations.

Ex) $9 \div 1 = \underline{\quad}$
 $\underline{\quad} \times 1 = 9$

1) $56 \div 8 = \underline{\quad}$
 $\underline{\quad} \times 8 = 56$

2) $63 \div 7 = \underline{\quad}$
 $\underline{\quad} \times 7 = 63$

3) $32 \div 4 = \underline{\quad}$
 $\underline{\quad} \times 4 = 32$

4) $20 \div 5 = \underline{\quad}$
 $\underline{\quad} \times 5 = 20$

5) $35 \div 7 = \underline{\quad}$
 $\underline{\quad} \times 7 = 35$

6) $36 \div 4 = \underline{\quad}$
 $\underline{\quad} \times 4 = 36$

7) $18 \div 6 = \underline{\quad}$
 $\underline{\quad} \times 6 = 18$

8) $40 \div 8 = \underline{\quad}$
 $\underline{\quad} \times 8 = 40$

9) $5 \div 5 = \underline{\quad}$
 $\underline{\quad} \times 5 = 5$

10) $14 \div 2 = \underline{\quad}$
 $\underline{\quad} \times 2 = 14$

11) $7 \div 7 = \underline{\quad}$
 $\underline{\quad} \times 7 = 7$

Fluency Problem Set #1

$1) \quad 7 \times 2 \quad = \underline{\quad}$

$2) \quad 3 \times 8 \quad = \underline{\quad}$

$3) \quad 4 \times 6 \quad = \underline{\quad}$

$4) \quad 2 \times 9 \quad = \underline{\quad}$

$5) \quad 6 \times 4 \quad = \underline{\quad}$

$6) \quad 8 \times 4 \quad = \underline{\quad}$

$7) \quad 7 \times 5 \quad = \underline{\quad}$

$8) \quad 9 \times 10 \quad = \underline{\quad}$

$9) \quad 6 \times 6 \quad = \underline{\quad}$

$10) \quad 7 \times 3 \quad = \underline{\quad}$

$11) \quad 8 \times 5 \quad = \underline{\quad}$

$12) \quad 0 \times 9 \quad = \underline{\quad}$

$13) \quad 6 \times 10 \quad = \underline{\quad}$

$14) \quad 7 \times 7 \quad = \underline{\quad}$

$15) \quad 9 \times 4 \quad = \underline{\quad}$

$16) \quad 3 \times 9 \quad = \underline{\quad}$

$17) \quad 6 \times 2 \quad = \underline{\quad}$

$18) \quad 9 \times 9 \quad = \underline{\quad}$

$19) \quad 7 \times 6 \quad = \underline{\quad}$

$20) \quad 5 \times 9 \quad = \underline{\quad}$

$21) \quad 8 \times 6 \quad = \underline{\quad}$

$22) \quad 7 \times 9 \quad = \underline{\quad}$

$23) \quad 6 \times 7 \quad = \underline{\quad}$

$24) \quad 8 \times 8 \quad = \underline{\quad}$

$25) \quad 6 \times 3 \quad = \underline{\quad}$

$26) \quad 9 \times 6 \quad = \underline{\quad}$

$27) \quad 7 \times 5 \quad = \underline{\quad}$

$28) \quad 8 \times 9 \quad = \underline{\quad}$

$29) \quad 10 \times 7 \quad = \underline{\quad}$

$30) \quad 7 \times 9 \quad = \underline{\quad}$

$31) \quad 6 \times 8 \quad = \underline{\quad}$

$32) \quad 4 \times 7 \quad = \underline{\quad}$

$33) \quad 9 \times 7 \quad = \underline{\quad}$

$34) \quad 6 \times 9 \quad = \underline{\quad}$

$35) \quad 4 \times 8 \quad = \underline{\quad}$

$36) \quad 7 \times 8 \quad = \underline{\quad}$

$37) \quad 9 \times 8 \quad = \underline{\quad}$

$38) \quad 8 \times 7 \quad = \underline{\quad}$

$39) \quad 7 \times 7 \quad = \underline{\quad}$

$40) \quad 8 \times 6 \quad = \underline{\quad}$

Fluency Problem Set #2

Use the numbers in the center starburst to complete the fact families.

$$\begin{array}{l} _ \times _ = _ \\ _ \times _ = _ \end{array} \quad \begin{array}{c} 3 \\ 2 \quad 6 \end{array} \quad \begin{array}{l} _ \div _ = _ \\ _ \div _ = _ \end{array}$$

$$\begin{array}{l} _ \times _ = _ \\ _ \times _ = _ \end{array} \quad \begin{array}{c} 20 \\ 5 \quad 4 \end{array} \quad \begin{array}{l} _ \div _ = _ \\ _ \div _ = _ \end{array}$$

$$\begin{array}{l} _ \times _ = _ \\ _ \times _ = _ \end{array} \quad \begin{array}{c} 42 \\ 6 \quad 7 \end{array} \quad \begin{array}{l} _ \div _ = _ \\ _ \div _ = _ \end{array}$$

$$\begin{array}{l} _ \times _ = _ \\ _ \times _ = _ \end{array} \quad \begin{array}{c} 56 \\ 8 \quad 7 \end{array} \quad \begin{array}{l} _ \div _ = _ \\ _ \div _ = _ \end{array}$$

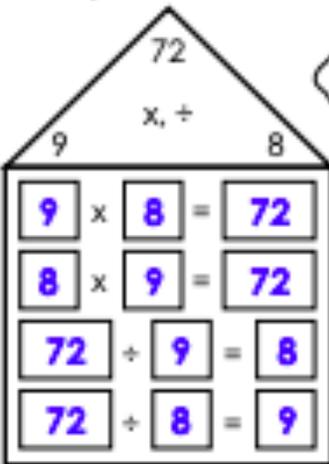
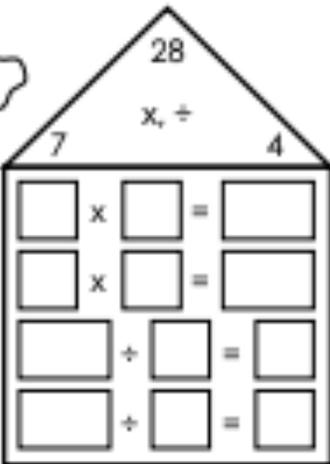
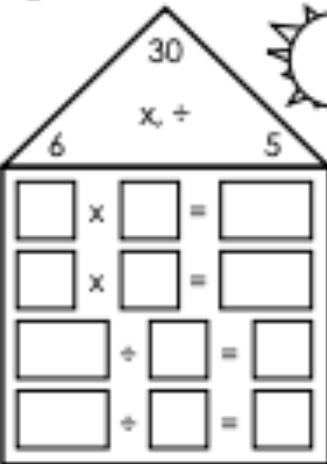
$$\begin{array}{l} _ \times _ = _ \\ _ \times _ = _ \end{array} \quad \begin{array}{c} 72 \\ 8 \quad 9 \end{array} \quad \begin{array}{l} _ \div _ = _ \\ _ \div _ = _ \end{array}$$

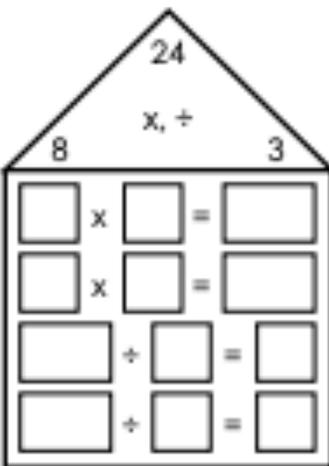
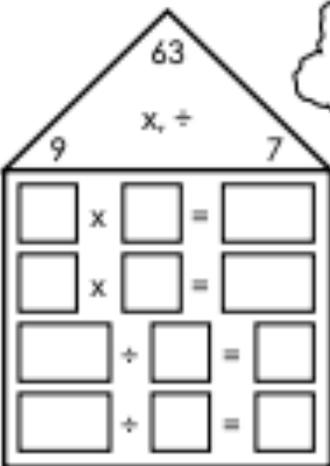
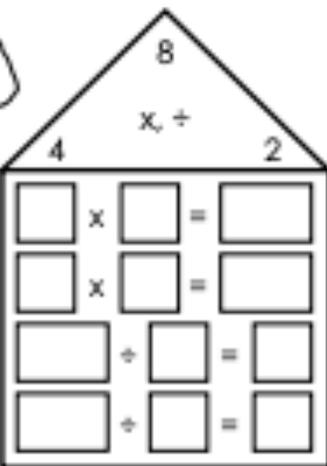
Fluency Problem Set #3

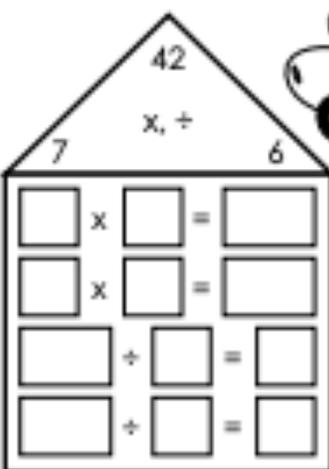
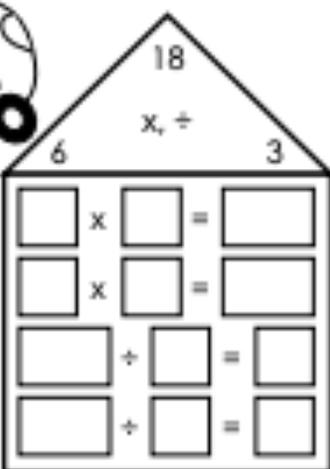
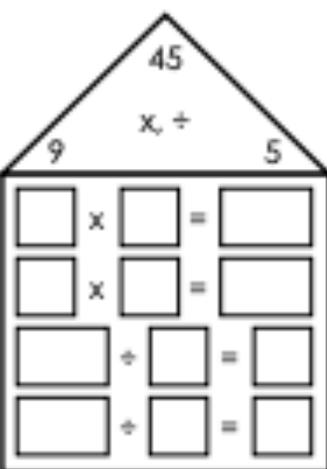
Name: _____

Fact Family Street

Use multiplication and division to fill in the fact family living in each house.

a.   c. 

d.  e.  f. 

g.  h.  i. 

Fluency Problem Set #4

$1) \quad 8 \div 2 = \underline{\hspace{2cm}}$

$2) \quad 5 \div 1 = \underline{\hspace{2cm}}$

$3) \quad 6 \div 3 = \underline{\hspace{2cm}}$

$4) \quad 12 \div 4 = \underline{\hspace{2cm}}$

$5) \quad 3 \div 3 = \underline{\hspace{2cm}}$

$6) \quad 10 \div 2 = \underline{\hspace{2cm}}$

$7) \quad 9 \div 3 = \underline{\hspace{2cm}}$

$8) \quad 10 \div 5 = \underline{\hspace{2cm}}$

$9) \quad 0 \div 2 = \underline{\hspace{2cm}}$

$10) \quad 4 \div 4 = \underline{\hspace{2cm}}$

$11) \quad 3 \div 1 = \underline{\hspace{2cm}}$

$12) \quad 15 \div 5 = \underline{\hspace{2cm}}$

$13) \quad 8 \div 2 = \underline{\hspace{2cm}}$

$14) \quad 12 \div 3 = \underline{\hspace{2cm}}$

$15) \quad 16 \div 4 = \underline{\hspace{2cm}}$

$16) \quad 5 \div 5 = \underline{\hspace{2cm}}$

$17) \quad 1 \div 1 = \underline{\hspace{2cm}}$

$18) \quad 4 \div 2 = \underline{\hspace{2cm}}$

$19) \quad 20 \div 5 = \underline{\hspace{2cm}}$

$20) \quad 12 \div 4 = \underline{\hspace{2cm}}$

$21) \quad 15 \div 3 = \underline{\hspace{2cm}}$

$22) \quad 0 \div 4 = \underline{\hspace{2cm}}$

$23) \quad 8 \div 2 = \underline{\hspace{2cm}}$

$24) \quad 12 \div 4 = \underline{\hspace{2cm}}$

$25) \quad 5 \div 5 = \underline{\hspace{2cm}}$

$26) \quad 6 \div 2 = \underline{\hspace{2cm}}$

$27) \quad 8 \div 4 = \underline{\hspace{2cm}}$

$28) \quad 4 \div 1 = \underline{\hspace{2cm}}$

$29) \quad 10 \div 2 = \underline{\hspace{2cm}}$

$30) \quad 15 \div 5 = \underline{\hspace{2cm}}$

$31) \quad 15 \div 3 = \underline{\hspace{2cm}}$

$32) \quad 4 \div 2 = \underline{\hspace{2cm}}$

$33) \quad 3 \div 3 = \underline{\hspace{2cm}}$

$34) \quad 16 \div 4 = \underline{\hspace{2cm}}$

$35) \quad 20 \div 5 = \underline{\hspace{2cm}}$

$36) \quad 9 \div 3 = \underline{\hspace{2cm}}$

$37) \quad 0 \div 1 = \underline{\hspace{2cm}}$

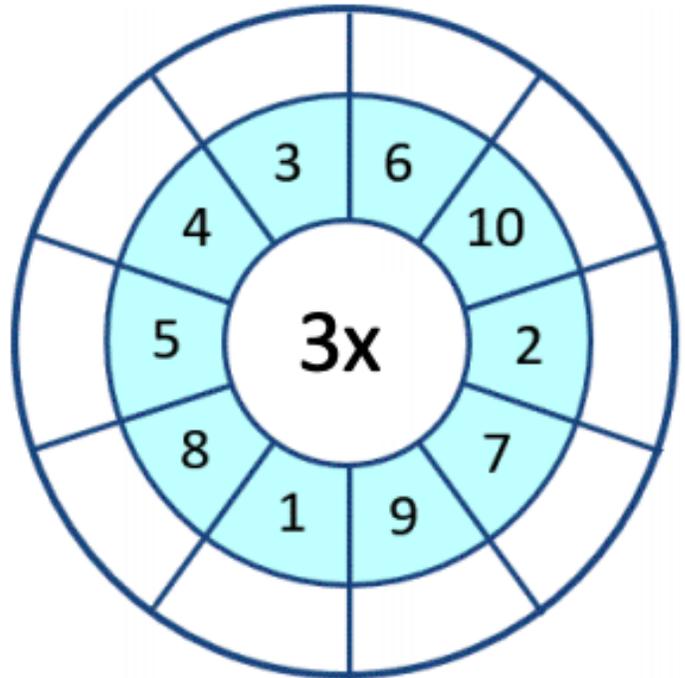
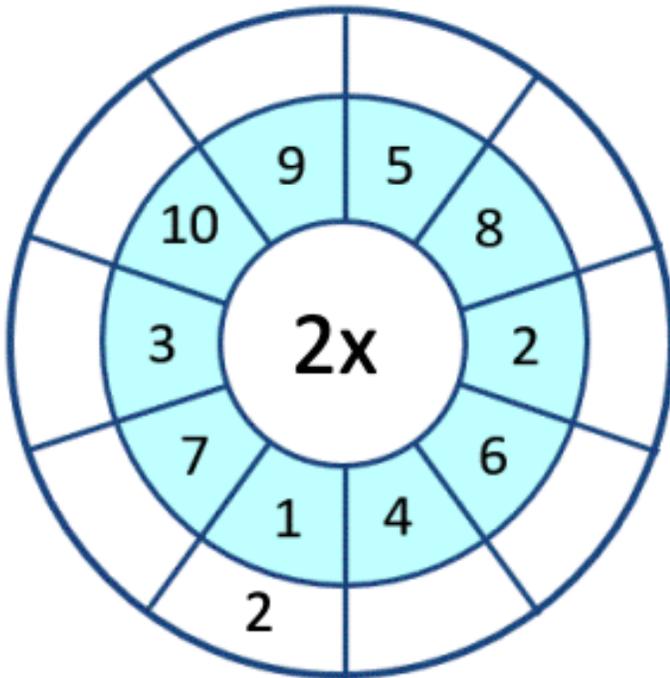
$38) \quad 20 \div 4 = \underline{\hspace{2cm}}$

$39) \quad 15 \div 5 = \underline{\hspace{2cm}}$

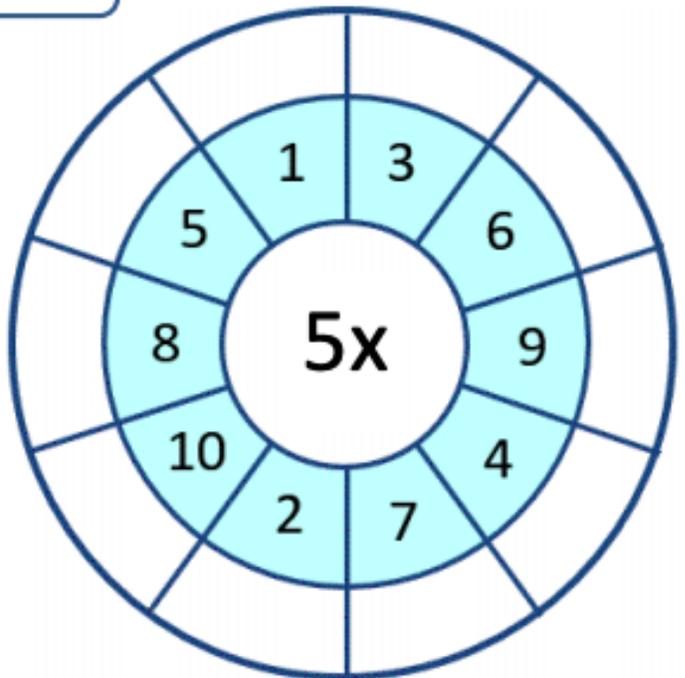
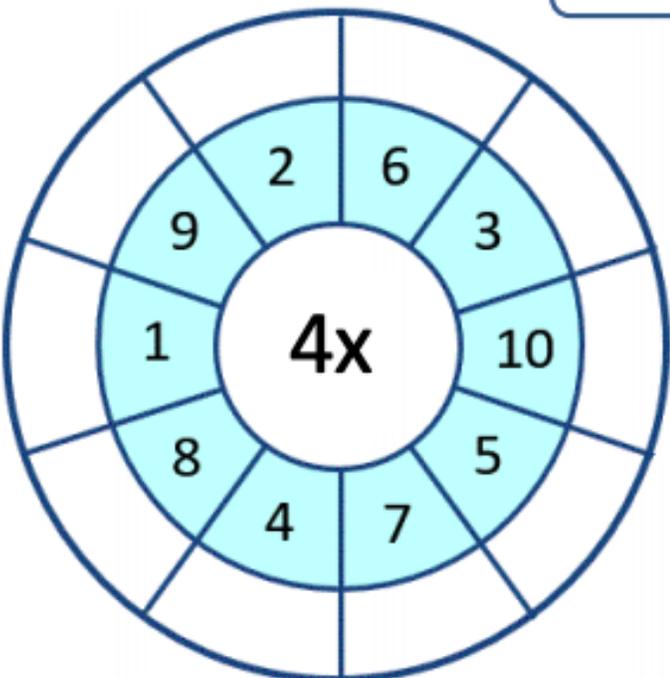
$40) \quad 12 \div 3 = \underline{\hspace{2cm}}$

Fluency Problem Set #5

Write each product in the outer ring of the circle.



UP TO X10



SAFE LANDING

CHALLENGE SHEET



DESIGN squad[®]
Global



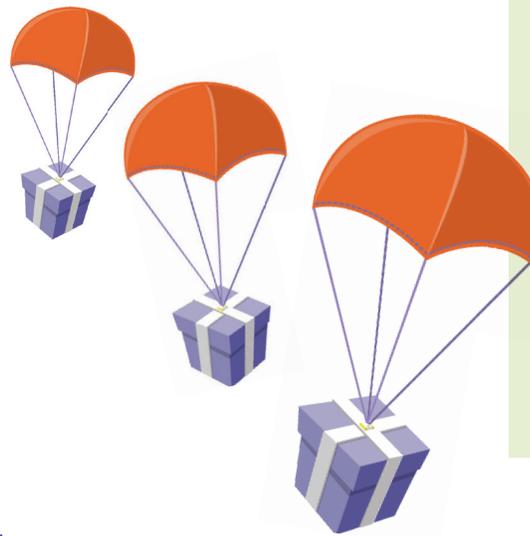
FOR MORE GREAT ACTIVITIES:
PBSKIDS.ORG/DESIGNSQUAD

YOUR CHALLENGE

Design and build a way to protect a container so its contents aren't damaged when dropped to the ground.

DEFINE THE NEED

In some situations, the only way for people to get essential supplies like food and medicine is when they are **airdropped** (dropped to the ground from a plane). Can you think of situations when an airdrop might be necessary? The job of an engineer is to make sure that containers of important supplies aren't damaged when dropped from great heights.



MATERIALS (per person)

- 1 or 2 pieces of cardboard
- 1 small paper or plastic cup
- 1 Ping Pong ball
- scissors
- masking tape
- ruler

You'll need some but not all of these materials:

- a plastic shopping bag
- string
- index cards
- plastic straws
- cotton balls
- rubber bands

BRAINSTORM & DESIGN

You are challenged to build and design a way to protect a Ping Pong ball inside of a cup as it's dropped from a height of at least 1 foot/30 centimeters. Think of the Ping Pong ball as medicine or other important supplies and the cup as your container. To succeed:

- the cup must land upright
- the ball can't fall out
- you can't make a cover for the cup!

Here are some ways an engineer might protect a container that's dropped to the ground.

- Slow the fall with a parachute.
- Cushion the fall with a shock absorber (a device that absorbs shocks and jolts, like the impact of something hitting the ground). Springs and cushions are good shock absorbers.

Brainstorm ways you might use a parachute or shock absorber to protect your cup and ball.



BUILD, TEST, EVALUATE, & REDESIGN

- Build your design.
- Test it by dropping your design from a height of 1 foot /30 centimeters.
- Use the ruler to measure the height.
- Observe any problems and redesign if needed.
- Once you're successful, try it from an even greater height.



Problem-Solving Tips

WHAT IF THE CONTAINER . . .

. . . tips over when it drops? Make sure your design is level when you release it. You can also add a cardboard base under the cup to stabilize it. Make sure the cup is centered on the base.

. . . bounces instead of landing softly? Add shock absorbers to cushion the fall.

ENGINEERING AND INVENTION IN ACTION

When Haiti was hit by a massive earthquake in 2010, it was too dangerous for aid workers to bring in supplies. Instead, thousands of pounds of food and clean water were airdropped to the people on the island.

Credit: Sgt James L. Harper, Jr.



An airdrop of humanitarian aid in Haiti.



DESIGN SQUAD GLOBAL is produced by WGBH Boston

MAJOR FUNDING



PROJECT FUNDING

the Lemelson foundation
improving lives through invention

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¡SUPERVIVENCIA ANIMAL!

Ciencias: Estructura y Función
de los Animales

Nombre: _____

Maestra/o: _____

<https://mass.pbslearningmedia.org/resource/supervivencia-animal-take-the-stage-en-espanol/supervivencia-animal-take-the-stage-en-espanol/support-materials/>

**INVENTA UN ANIMAL IMAGINARIO, ESCOGE UN AMBIENTE,
CREA DOS ESTRUCTURAS Y FUNCIONES, Y DIBUJALO ABAJO.**

NOMBRE DEL ANIMAL _____

AMBIENTE _____

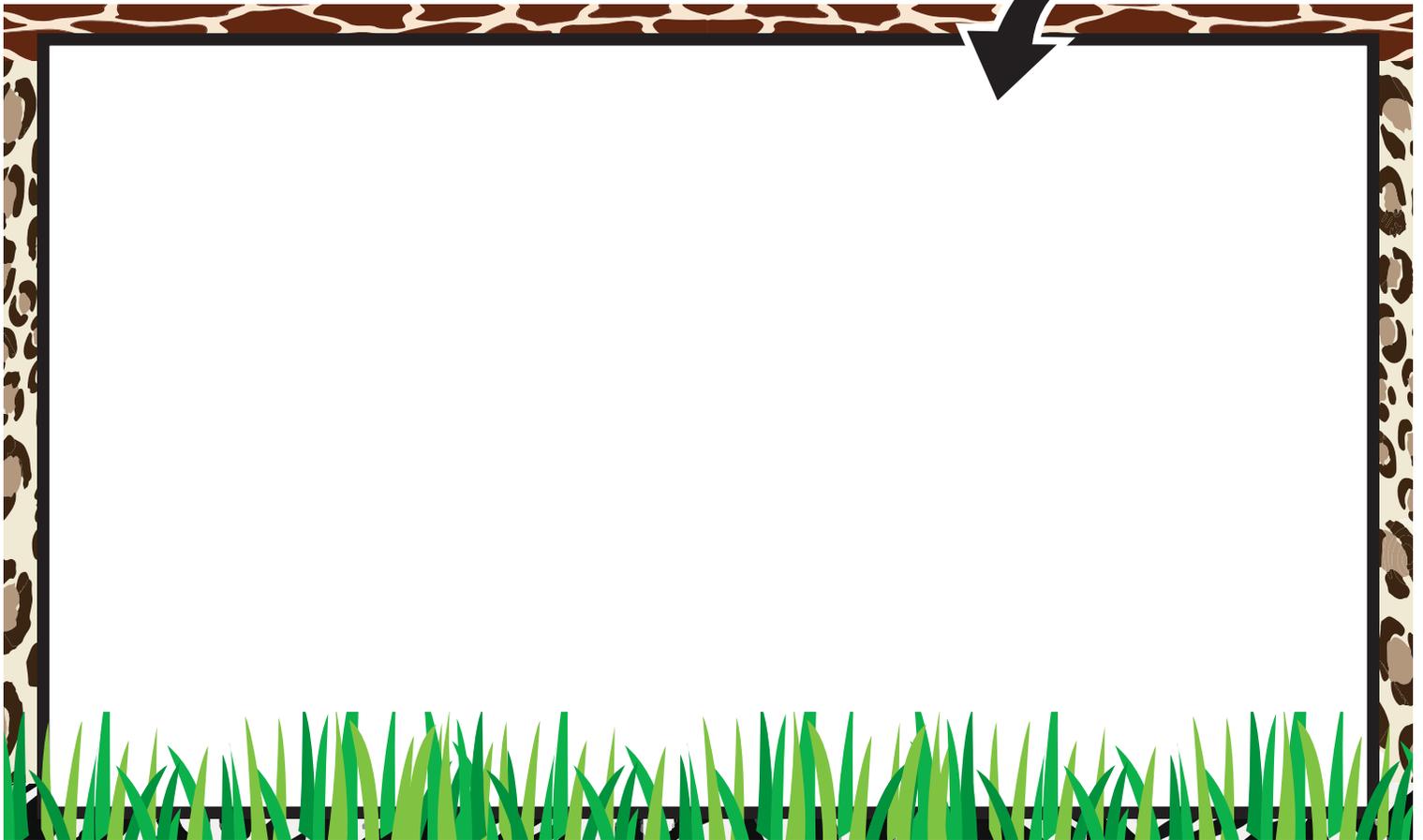
ESTRUCTURA #1 _____

FUNCIÓN _____

ESTRUCTURA #2 _____

FUNCIÓN _____

**Dibuja Tu
Animal Aquí**





ANIMAL SURVIVAL!

Science: Structure and Function
of Animals

Name: _____

Teacher: _____

<https://mass.pbslearningmedia.org/resource/animal-survival-take-the-stage/animal-survival-take-the-stage/>

MAKE UP AN IMAGINARY ANIMAL, CHOOSE AN ENVIRONMENT, CREATE TWO STRUCTURES AND FUNCTIONS, AND DRAW IT BELOW.

ANIMAL NAME _____

ENVIRONMENT _____

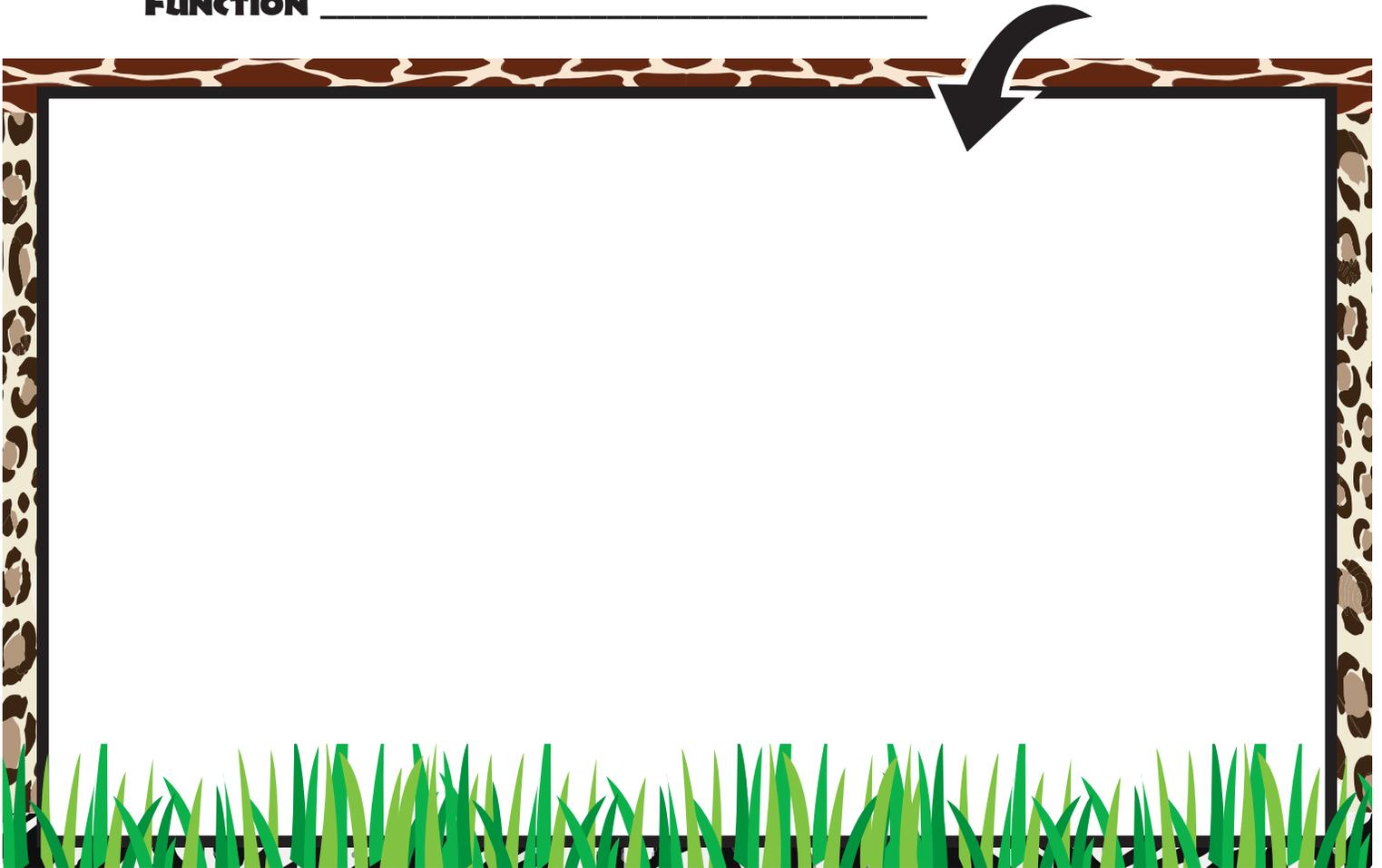
STRUCTURE #1 _____

FUNCTION _____

STRUCTURE #2 _____

FUNCTION _____

**Draw Your
Animal Here**



Settling the Merrimack Valley

So far we've been learning about the native people who lived in the area we now know as Lowell. But when did the European settlers arrive? Much of the early contact between Englishmen and Indians in the early 1600s centered around trading beaver skins and other animal pelts. Conflict grew gradually as more Englishmen arrived and wanted more land for farming and raising livestock. The tribes in the "Penacook Confederacy" were forced out around 1686. Then additional settlers came to the area because of the water power from the Merrimack River. The steep drop at Pawtucket Falls became a problem for people trying to float logs down the river to the shipbuilding yards in Newburyport. The solution? The first canal! It was built in 1792, to provide a different route around the falls. Later, the Middlesex Canal was built to create a direct water route from Middlesex Village to Boston using a system of locks between the Merrimack and Mystic Rivers.



But what is a lock? Locks were invented to address the problem of waterfalls. Boats can't go over them! A lock is a structure for raising and lowering boats between stretches of water that are at different levels. The boat goes into a chamber with two gate doors. Once the gate doors are closed, water is pumped in if the boat needs to be lifted higher, or released if the boat needs to be lowered. It's like a boat elevator!

Watch this video to see how a lock works:

<https://www.youtube.com/watch?v=sGCA3XymiFc>

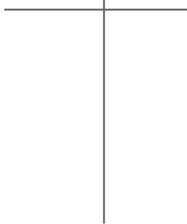
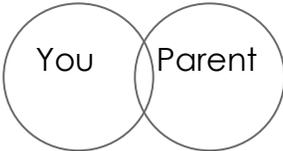
And watch this video to see how it operated in the 1800s:

<https://www.nps.gov/choh/learn/photosmultimedia/multimedia.htm>

You can see a working lock for yourself on the Pawtucket Canal by taking a tour at the Lowell National Historical Park.

ESL at Home 3-5 Weeks 9-10

Use notebook paper to complete these activities. Do one each day!

Monday	Tuesday	Wednesday	Thursday	Friday
<p>Pick a character from a book. Write a message that character would post on social media! Can include pictures!</p> 	<p>Use things in your home to create a kind of store (clothing, furniture, etc.). Write what you will sell and what it will cost!</p> <p>Example: Red t-shirt: \$10 Jeans: \$17.99 Gold necklace: \$4.50</p>	<p>Create a cooking show! Choose something to make with your family! Explain the steps of how to make the dish while you are cooking together!</p>	<p>Make a t-chart of your toys that are heavy and toys that are light.</p> 	<p>Imagine you were an animal (Example: horse, cow, pig, chicken) that lived on a farm where all the animals could talk. Write and draw about your adventure with your animal friends.</p>
Monday	Tuesday	Wednesday	Thursday	Friday
<p>Find items around your house and create an instrument. Come up with a song and write lyrics to it!</p> 	<p>Pick a character from a TV show, movie, or book. Write and describe the character.</p> <p>Example: Batman is wearing black. He is kind because he saves others.</p>	<p>Read a story or chapter aloud to your family, but don't read the end (or what happens next). Have them predict what will happen. Then read it to them and see if they were correct!</p>	<p>Interview your parents or grandparents about what games they played when they were little. Create a venn diagram about how games are similar and different.</p> 	<p>List four things in your home that produce light energy. List four things in your home that produce heat energy. List four things in your home that reflect light.</p>