

# Fourth Grade Home Learning Activity Guide

## Week 11

Reading and Writing Activities  
(Suggested: 45 minutes of off-line activities)

### Activity 1

#### Character Response and Change

Read a fiction book for at least 45 minutes, then respond to the prompt below:

Identify more than one trait of a character in the book.



How do the character's traits change across the story?

### Activity 2

#### Character Motivations

Read a fiction book for at least 45 minutes, then respond to the prompt below:

Figure out what your character really wants. Think about what is getting in the way for him/her.



Find parts of the text that support your ideas.

**Activity 3**

Theories About Our Characters

Read a fiction book for at least 45 minutes, then respond to the prompt below:

Explain your theories about a character (more than one idea you are having).



Find parts that support your ideas.

**Activity 4**

Theme

Read a fiction book for at least 45 minutes, then respond to the prompt below:

Discuss the theme(s) of the story.



Identify/show parts that support your idea.

**Activity 5**

Lessons Learned

Read a fiction book for at least 45 minutes, then respond to the prompt below:

Think about what this book might be trying to teach the reader.



"Sometimes in life..."

**Actividades de lectura y escritura**  
(Sugerencia: 45 minutos de actividades sin conectarse a la Internet)

**Actividad 1**

Los personajes responden y cambian

Lee un libro de ficción por lo menos 45 minutos, luego responde a la pregunta de abajo:

Identifica más de una característica del personaje en el libro.



¿Cómo cambian las características del personaje a través del cuento?

**Actividad 2**

Motivaciones del personaje

Lee un libro de ficción por lo menos 45 minutos, luego responde a la pregunta de abajo:

Descifra que es lo que realmente desea tu personaje. Piensa en que se interpone en el camino de él/ella.



Encuentra partes del texto que apoyan tu idea.

### Activity 3

#### Teorías sobre nuestros personajes

Lee un libro de ficción por lo menos 45 minutos, luego responde a la pregunta de abajo:

Explica tus teorías sobre el personaje (más de una idea que tienes).



Encuentra partes del texto que apoyan tu idea.

### Activity 4

#### El tema

Lee un libro de ficción por lo menos 45 minutos, luego responde a la pregunta de abajo:

Discute el(los) tema(s) del cuento.



Identifica/enseña las partes del texto que apoyan tu idea.

### Activity 5

#### Lecciones aprendidas

Lee un libro de ficción por lo menos 45 minutos, luego responde a la pregunta de abajo:

Piensa en lo que este libro podría estar tratando de enseñarle al lector.



-A veces en la vida...



**Math Activities**  
(Suggested: 45 minutes of off-line activities)

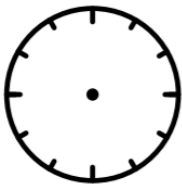
**Activity 1**

**Angle Drawing**

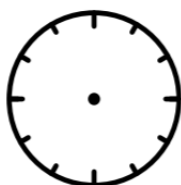
**Geometry and Measurement: Angles**

Draw the models below then label each model with the given angle. Remember there are  $360^\circ$  in a circle

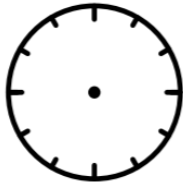
$120^\circ$



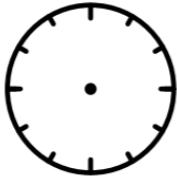
$30^\circ$



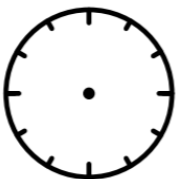
$90^\circ$



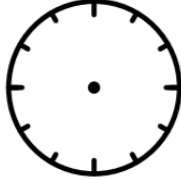
$270^\circ$



$300^\circ$



$180^\circ$

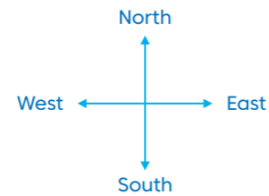


**Activity 2**

**Niko's Ride**

**Algebraic Reasoning: Area**

Niko bikes the same route after school every day. He starts by biking 15 blocks west. Then, he goes 12 blocks north. Then he completes the path by biking 15 blocks east and 12 blocks south. What is the area of the Niko's bike path?



Niko decided to change his route and went 13 blocks west, 14 blocks north, 13 blocks east and 14 blocks south. Which route has a smaller area? Justify your answer.



### Activity 3

#### Comparing Fractions

#### Number and Operation: Fractions

Use the digits 1 to 9, at most one time each to create two different fractions

- one that is less than one half
- one that is more than one half.

$$\frac{\square}{\square} < \frac{1}{2} \text{ and } \frac{\square}{\square} > \frac{1}{2}$$

Draw a picture to prove your answers.

### Activity 4

#### Addition Practice

#### Number and Operations: Addition

Use 2 numbers from the box to complete the problems below.

97	204	297
405	498	607

$$\begin{array}{r} + \square \\ \square \\ \hline 1,012 \end{array}$$

$$\begin{array}{r} + \square \\ \square \\ \hline 394 \end{array}$$

### Activity 5

#### Multiplication Practice

#### Number and Operations: Multiplication

Write the multiplication sentence and solve


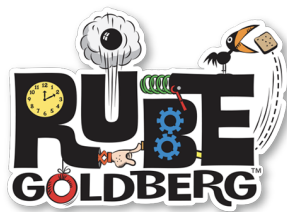
Terry used 53 candies to decorate a small cake. She used 3 times that the number of candies to decorate one large cake. Terry decorated 11 large cakes. How many candies did Terry use to decorate the large cakes?



Joe wants to use the Hiking Club's funds to purchase new walking sticks for each of its 19 members. The sticks cost \$26 each. The club has \$480. Is this enough money to buy each member a new walking stick? If not, how much more money is needed?



**Science Activities**  
(Suggested: 25 minutes of off-line activities)

Activity 1	Activity 2
<p align="center"><b>Moon Journal Long-term Project</b></p> <p><b>Earth and Space: Recognizable Patterns</b></p> <p>Observe the sky every night. Illustrate and describe the following:</p> <ul style="list-style-type: none"> <li>• Moon</li> </ul> <p><b>Every night:</b> Predict the appearance of the Moon for tomorrow night. Now that you have illustrations of the Moon for weeks, you should be able to see a pattern and can predict the appearance of the Moon for next week!</p> <p><b>Friday:</b> Provide a <b>Moon report</b> to your family. (Poster, power point, video, etc.)</p> <ul style="list-style-type: none"> <li>• Include illustrations of the Moon on Monday, Tuesday, Wednesday, and Thursday night.</li> <li>• Include your prediction for Friday night.</li> <li>• Include your predictions for next week.</li> </ul> <p>Tweet out a picture or video of your Moon report! Tag @AldineISD @STARS_902 and #AldineAtHome</p>	<p align="center"><b>Weather Journal Long-term Project</b></p> <p><b>Earth and Space: Recognizable Patterns</b></p> <p>Observe the weather every day. Record the following:</p> <ul style="list-style-type: none"> <li>• Temperature</li> <li>• Wind conditions</li> <li>• Precipitation</li> <li>• Cloud coverage</li> </ul>  <p><b>Everyday:</b> Predict the weather for tomorrow.</p> <p><b>Friday:</b> Provide a <b>weather report</b> for the week to your family. (Poster, power point, video, etc.)</p> <ul style="list-style-type: none"> <li>• Include the data for Monday-Friday: temperature, wind conditions, precipitation, and cloud coverage</li> <li>• Include illustrations</li> <li>• Include predictions for Saturday and Sunday</li> </ul> <p>Tweet out a picture or video of your weather report! Tag @AldineISD @STARS_902 and #AldineAtHome</p>
Activity 3	Activity 4
<p align="center"><b>All Systems Go!</b></p> <p><b>Earth and Space: Sun, Earth, and Moon System</b></p> <p>There are recognizable patterns in the world and among the Sun, Earth, and Moon system.</p> <p>The Earth and Moon have physical characteristics that you can compare. These physical characteristics distinguish the Earth from the Moon.</p>	<p align="center"><b>Inventor's Challenge</b></p> <p><b>Force and Motion: Testing Force</b></p>  <p align="center">The world of hilarious invention!</p>

The physical characteristics to observe:

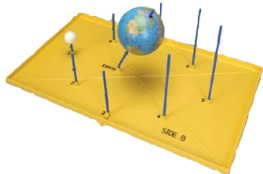
Earth	Moon
Shape	Shape
Size	Size
Color	Color
Physical State	Physical State
Rotates on axis	Rotates on axis
Orbits around the Sun	Orbits around the Earth
Position: 3rd planet from the Sun	The Moon's shape appears to change

Some of the physical characteristics may be the same, like the shape, but if you compare all of the physical characteristics you should be able to tell the difference between Earth and the Moon.

Scientists create models to represent things that cannot be seen accurately and use them to learn from.

Create a model of the Earth and Moon system. Remember the **physical characteristics** of the Earth and Moon when creating your model. Follow these guidelines:

- Gather materials to create your model
- Create a model that represents the Earth and Moon system accurately (You may include the Sun)
- Illustrate your model of the Earth and Moon system
- Label the physical characteristics on your illustration
- Compare the physical characteristics of the Earth and Moon and write a description of the model you created



Participate in the Bar of Soap Rube Goldberg Video Challenge!

Build a machine that drops a bar of soap into someone's hand!

Goto <https://www.rubegoldberg.com/> to join the challenge.



**FREE**

**Bar of Soap RUBE GOLDBERG Video Challenge**

1. **Task:** Drop a bar of soap into someone's hand
2. **Step count:** 10-20 steps
3. **Team requirements:** All ages, anyone in your family or quarantined group, no size limit
4. **Submission requirements:** Build and film a non-edited working run of your machine and introduce us to the people in your family group that helped build it. Make sure we can see all the steps. The larger the steps, the more visible they will be when filmed.
5. **Where to submit:** Upload your video to YouTube, mark "Not Private" and email the link to [rubechallenge@rubegoldberg.com](mailto:rubechallenge@rubegoldberg.com)
6. **Deadline:** We will be accepting rolling submissions from now through midnight, May 31, 2020.
7. **Prizes:** Three winning machines will be selected, winners notified and announced on [rubegoldberg.com](https://www.rubegoldberg.com/) by mid-June. Each winning team will receive a Rube Goldberg Family Swag Bag.
8. **What's a Rube Goldberg Machine anyway?** [CLICK HERE](#)
9. **Hashtags:**  
#boredombustingrubemachine  
#rubetotherecue2020  
#rgbarofsoapchallenge

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Submit your video by May 31!

Put your inventor hat on! Follow these steps of the engineering-design process to design and create a Rube Goldberg machine:

- **THINK:** What do I know about force and motion? How can the position of an object be changed? What do I know about simple machines?
- **ASK:** What materials can I use to make my machine?
- **IMAGINE:** Brainstorm possible machine designs.
- **PLAN:** Draw diagrams, or make small models of your design.
- **CREATE:** Come up with several ideas, but pick the one you think is best. Create your machine.
- **IMPROVE:** Test your machine. There will be failures so test your machine and make adjustments as needed for success.

Tweet out a picture or video of you and your Bar of Soap Rube Goldberg machine! Tag @AldineISD @STARS\_902 and #AldineAt Home

**Discussion:** What do you notice about the Earth and Moon system? Which physical characteristics do the Earth and Moon have in common? Which physical characteristics are different for the Earth and Moon?

Describe how the appearance of the moon changes over time?

**Learning Extension:** The Moon's shape appears to change over time. Make adjustments to your model to show how the Moon's shape appears to change. Does the shape really change? How does this happen?  
You may also want to include the other planets to your model.

## Activity 5

### STEM Challenge #11

#### Critical Thinking: Problem Solving

Marble Run Challenge - Design and create a marble run with materials in and around your home. (If you do not have a marble, use another object that will roll.)

Gravity constantly pulls down on the **marble**, causing it to roll on any surface that's not perfectly level. If the force of friction is greater than the force of gravity, the **marble** will roll to a stop. By making your **track** just steep enough to overcome friction, you can keep your **marble** rolling for a long time!

Here is the [challenge and examples of a marble run](#)

Here are things to consider when designing your marble run:

- Area for your marble run
- Materials to create your marble run
- Gravity
- Friction
- Marble moving for 60 seconds



**Challenge:** Build a marble run where the marble rolls for 60 seconds.

Discuss how the materials you used made it easier or harder to build your marble run. Did you change anything when you started building? What could you do differently?

**Learning Extension:** Design and create a marble run where the marble rolls for 2 minutes or more. How long can your marble run get the marble to roll?

Tweet out a picture or video of you and your marble machine! Tag @AldineISD @STARS\_902 and #AldineAt Home

**Social Studies Activities**  
(Suggested: 25 minutes of off-line activities)

Activity 1

Autobiography

**My Point-of-View**

Write an autobiography of your life.

An autobiography is a non-fiction story of a person's life, written by the subject themselves from their own point of view.

Here are some key elements to consider including in your autobiography:

**A description of your personal origin story:** This can include your hometown, your family history, some key family members and loved ones, and touchstone moments in your education.

**Significant experiences:** Add accounts of each personal experience that shaped your worldview and your approach to life in the present day.

**A unique and compelling title:** Steer clear of generic phrases like "my autobiography" or "the story of me, my family, and famous people I know."



Activity 2

Picture Collage

**Benefits of Science and Technology**

Create a collage with pictures (drawn or cut out) of scientific discoveries and technological innovations in the fields of aerospace, agriculture, energy, and technology that have benefited your life. Write a brief explanation of the benefits of each picture in your collage.





### Activity 3

#### Song or Rap

#### My Family Customs and Traditions

Write a song or rap about your family's customs and traditions. Perform your song or rap for your family.



### Activity 4

#### Tri-fold Brochure

#### Memorial Day

Create a tri-fold brochure and explain the history, significance, and traditions of Memorial Day. Be sure to include illustrations in your brochure.



### Activity 5

#### Commemorative Stamp

#### History in Art

**Commemorative stamps** are regular postage stamps issued to honor some event, activity, or person of national importance; unlike other regular postage stamps (known as definitives), they are printed only once and are allowed to go out of circulation as their supply is used up.

Choose any person in Texas history and design a commemorative stamp to honor them. Draw a symbol or picture to reflect what you think of when that person comes to mind. Be sure to list the price of the stamp in one of the corners and be able to explain the significance of the price you chose.

