

## FIFTH GRADE AMI PACKET 2018-2019

### 5th Grade Math AMI Days 1-5:

5th Grade Math AMI Day 1: 1. I have 15 tens, 33 ones and 5 hundreds. Who am I? 2. I have 11 ones and I am between 70 and 80. How many tens do I have? Who am I? 3. I am a 3 digit whole number between 500 and 700. I am divisible by 5 but not 10. The sum of my digits is 18. Who am I?

### 5th Grade Math AMI Day 2:

**7785797**

1. How many times greater is the digit in the hundred thousands place than the digit in the hundreds place? 3. What is 7,785,797 multiplied by 13?

**5th Grade Math AMI Day 3:** Use the operations of addition, subtraction, multiplication, and /or division to write an expression that uses four 4s to form each whole number from 0 to 5. (Examples:  $4+4-4-4=8$ ,  $4 \div 4 \times 4 + 4 = 8$ ,  $4 \times 4 - 4 \div 4 = 15$ ,  $4 + 4 + 4 \div 4 = 9$ )

5th Grade Science & Math AMI Day 5 (day 4 is on Science page): You are sitting at home on this snow day and realize that you want to bake some cookies for your classmates. You use the following recipe to make 24 cookies for your classmates or yourself:

- 1-1/3 cups all-purpose flour
- 1/2 teaspoon baking soda
- 1/4 teaspoon baking powder
- 1/2 cup butter, SOFTENED
- 3/4 cup white sugar
- 1/2 egg
- 1/2 teaspoon vanilla extract

1. You taste one of the cookies and decide that you could make it better by increasing one or more of the ingredients or adding an ingredient. What would you change? Why did you make this change? 2. Write a testable hypothesis for your idea. 3. Design a new recipe with your change. Your ingredients list should include all the correct measurements and ingredients for your new cookie. 4. Since you have already eaten so many cookies, you do not want to make a full batch of the cookies using the new recipe. What are the measurements of the new recipe if you decide to make 1/2 a batch? What are the measurements of the new recipe if you decide to make 1/3 of a batch? **YOU DO NOT NEED TO MAKE ANOTHER BATCH, JUST WRITE THE NEW RECIPE OF WHAT YOU WOULD NEED TO USE.**

### 5th Grade Science AMI Days 1-5:

5th Grade Science AMI **Day 1:** It's time to review matter with some examples around your home.

1. Find 3 items in your kitchen that are made of matter. Tell what they are and model what the particles inside of them would look like. 2. You mix some marshmallows in hot chocolate to make it taste better. Did a chemical change happen to the marshmallows? Explain why you think that. 3. You've left your bike outside all year and just remembered that it is still out there in the snow/ice. You go to bring it in and notice that there are some rust spots. The iron on your bicycle, the oxygen in the air, and the water in the ice/snow, worked together to form the rust on your bike. Is the rust a new substance, forming from a chemical change? Use evidence from the prompt to support your answer.

5th Grade Science AMI **Day 2:** You are sitting at home on your snow day and you are bored. You start searching through drawers and find an old light bulb. You think about what you could use around the house to create a small circuit to light the bulb. You find a small piece of metal in the drawer too. You aren't sure what it is, but it is a good size to tinker and experiment with. Design an experiment, using just what you have at home, to determine what this piece of metal is and if it could be used to light your light bulb. You may draw or write out your steps of your experiment.

5th Grade Science AMI **Day 3:** You've come inside on a cold day and make yourself a cup of hot chocolate. As you are gathering your materials, you begin to think about your science class. You do some measuring and find that your cup with 8 ounces of hot water weighs 690 grams. Your powdered hot chocolate mix weighs 21 grams. You stir the mix in to the hot water. Choose the best answer below and explain why you chose your answer.

a. Your cup of hot chocolate will weigh 669 grams. b. Your cup of hot chocolate will weigh less than 669 grams. c. Your cup of hot chocolate will weigh 690 grams. d. Your cup of hot chocolate will weigh about 700 grams. e. Your cup of hot chocolate will weigh 711 grams. f. Your cup of hot chocolate will weigh more than 711 grams.

5th Grade Science & Math AMI **Day 4** (day 5 is on Math page): Since all of your family is home for the snow day, there is much debate over bathroom time. Use the data provided to answer the questions. On average, a typical shower uses 2.5 gallons of water in 1 minute and on average, a typical bathtub can hold 33 gallons.

1. Use the data above to create a data table for how much water the shower uses for up to 10 minutes (0 minutes up to 10 minutes). 2. Utilize the graph (right) to estimate how much time is spent in the shower if 11 gallons of water are used. 3. Your brother argues that your shower uses more water than his bath. You shower for 14 minutes. Make a claim for which one of you is using less water. Use data as evidence to support your claim.

## 5th Grade English Language Arts (ELA) AMI Days 1-5:

Use the article “To the Moon and Back” below to answer the questions for **DAYS 1-3** Astronauts Aim for the Moon—And Beyond NASA announced plans that are out of this world! The space agency hopes to send humans to the moon again by 2020. NASA hopes to make a giant leap—back to the moon. Back in 2005, the U.S. space agency announced its plan to send four astronauts to the moon within the next 15 years. NASA officials say the moon is just the first step. They hope future missions will take astronauts to Mars and beyond. "We will return to the moon no later than 2020 and extend the human presence across the solar system and beyond," says Michael Griffin, the head of NASA. So far, the moon is the only place beyond Earth that humans have visited. At 226,000 miles away, the moon is Earth’s closest space neighbor. New Spaceship The new NASA mission may have the same destination, but the astronauts will have a new way of getting there. Astronauts who trek to the moon will do their traveling in a crew exploration vehicle—a souped-up version of the three-person Apollo capsule that transported explorers to the moon. "It’s very Apollo-like," says Griffin, "but bigger." While on the moon, astronauts hope to demonstrate that they can live off the land. They will use resources on the moon to produce drinkable water and fuel. The moon journey would be a trial run for a Mars mission. Astronauts would spend more time on Mars—at least 500 days—because it is 49 million miles from Earth. Because they will be on the planet so long, astronauts will need to be able to sustain themselves using local resources; they will not be able to bring enough supplies for the whole mission. Split Decisions Not everyone is over the moon about NASA’s plans. The project is estimated to cost \$104 billion. Critics say the price tag is too high, especially because the United States is dealing with a federal budget deficit and the war on terror. A deficit occurs when a sum of money is short of its expected total. However, supporters insist that space exploration offers enormous long-term benefits to all of humankind and that the United States should not be deterred from this mission. "The space program is a long-term investment in our future," Griffin says.

*\*Note: This article was published in 2007. The program described in the article, NASA’s Constellation program, is no longer active. This news article has been preserved for historical context.*

5th Grade ELA AMI Day 1: Underline key details (5 Ws) in each section of the article. Then use the key details to write a main idea statement for each section. (RI.5.2)

5th Grade ELA AMI Day 2: Notice the 3 underlined examples of figurative language in the article. (RI.5.4) 1. All 3 are examples of what type of figurative language? 2. Explain the meaning of each underlined phrase.

**5th Grade ELA AMI Day 3: Write a paragraph to answer the following question: How would a trip to the moon be similar to a trip to Mars for NASA astronauts? (RI.5.1)**

5th Grade U.S. History and ELA **DAY 4**(day 4 and 5 activity is for both Social Studies and ELA): Draw and complete an opinion graphic organizer for the opinion essay prompt below. (W.5.1). You are going to write an essay in which you express and support your opinion. Similar to the astronauts going to an unknown planet, the explorers during the 1500’s left Europe to explore new and undiscovered lands. Many risked their lives and never saw their families again. Some that went exploring had wondrous adventures and earned a good paycheck. Would you have risked everything to try discover something new, or would you choose to remain in the safety of what you know. Write an essay in which you give reasons for your choice and explain why your choice is better than the other options. Be sure to include

factual details and examples to support your reasons.

5th Grade Social Studies and ELA **Day 5**(day 4 and 5 activity is for both Social Studies and ELA): Now, choose one reason and evidence part of your completed graphic organizer and write a body paragraph to support your opinion.

### **5th Grade Social Studies AMI Days 1-5:**

5th Grade Social Studies **DAY 1:** Read the following short passage, Family Roles. Write a 5 sentence summary of the roles of children in American Indian life.

“Children also had an important role in the family. Yet childhood was short. Children would leave the protective care of their mothers by the time they were in their teens. They would then begin training for their roles as adults. Children also listened to storytellers to learn about their group’s customs and traditions. Teen boys would learn from their fathers and other men in their village. They had to prove that they were strong and brave. One test that they had to pass to show these traits was spending time alone in the wilderness. Girls would learn wilderness skills, too. Some games and activities for children helped teach them the skills they needed as they got older. For example, children would learn how to fish. This skill would later help them provide food for the family and village.”- Pearson, 2018. American Indian Culture.

5th Grade Social Studies **DAY 2:** The Mayflower Compact was an important document that helped establish laws for the new colonists. Just like colonies, families also have rules they follow. Create a family constitution that describes the rules of your household. Briefly explain how the rules may be changed or amended over time.

5th Grade Social Studies **DAY 3:** Create a folktale where the main character has to solve a problem or overcome a worry or fear. Think about the Native American folktales you may have studied to give you ideas.

5th Grade Social Studies and ELA **DAY 4** (day 4 and 5 activity is for both Social Studies and ELA): Draw and complete an opinion graphic organizer for the opinion essay prompt below. (W.5.1). You are going to write an essay in which you express and support your opinion. Similar to the astronauts going to an unknown planet, the explorers during the 1500’s left Europe to explore new and undiscovered lands. Many risked their lives and never saw their families again. Some that went exploring had wondrous adventures and earned a good paycheck. Would you have risked everything to try discover something new, or would you choose to remain in the safety of what you know. Write an essay in which you give reasons for your choice and explain why your choice is better than the other options. Be sure to include factual details and examples to support your reasons.

5th Grade Social Studies and ELA **DAY 5**(day 4 and 5 activity is for both U.S. History and ELA): Now, choose one reason and evidence part of your completed graphic organizer and write a body paragraph to support your opinion.