



*Winchester Public Schools*

4<sup>TH</sup> GRADE

*Learning Support Resource*

**Winchester Public Schools is pleased to offer you and your child a Learning Support Resource (LSR) to help you remain actively engaged in the learning process while not in school. Included in the resource packet are online resources with usernames and passwords, a “menu” of learning activities that include various content areas and levels of difficulty, and worksheets designed to support grade level content review for writing, reading, mathematics, and science.**

See below for a list of online resources to encourage your student(s) to continue practicing skills they've learned so far this school year! When appropriate, websites have been labeled with suggested grade levels to help you determine which is best for your learner(s). Have fun!

**Literacy:**

| Website   | Suggested Grade Level: |
|---|------------------------|
| <a href="https://www.starfall.com/h/">https://www.starfall.com/h/</a>   | PK-3                   |
| <a href="https://www.ixl.com/ela/grade-6">https://www.ixl.com/ela/grade-6</a>   | 6                      |
| <a href="https://www.storylineonline.net/">https://www.storylineonline.net/</a>   | Any                    |
| <a href="https://www.abcya.com/">https://www.abcya.com/</a>   | Any                    |
| <a href="https://improvingliteracy.org/kid-zone/">https://improvingliteracy.org/kid-zone/</a>   | Any                    |
| <a href="https://kids.nationalgeographic.com./">https://kids.nationalgeographic.com./</a>   | Any                    |
| <a href="https://www.winpublib.org/collections/ebooks/">https://www.winpublib.org/collections/ebooks/</a><br>(If you have a library card) | Any                    |

**Math:**

| Website  | Suggested Grade Level: |
|--|------------------------|
| <a href="https://www.tumblemath.com/home.aspx">https://www.tumblemath.com/home.aspx</a><br>(Stories and Literature that align with Math) | Any                    |
| <a href="https://www.mathplayground.com/">https://www.mathplayground.com/</a>  | 1-6                    |
| <a href="https://www.factmonster.com/math/flashcards">https://www.factmonster.com/math/flashcards</a>                                    | 1-6                    |
| <a href="https://www.abcya.com/">https://www.abcya.com/</a>  | Any                    |
| <a href="https://www.funbrain.com/math-zone">https://www.funbrain.com/math-zone</a>  | Any                    |
| <a href="http://mrnussbaum.com/mathgames/">http://mrnussbaum.com/mathgames/</a>  | 1-6                    |
| <a href="https://www.starfall.com/h/">https://www.starfall.com/h/</a>  | PK-3                   |
| <a href="https://www.mathlearningcenter.org/resources/apps">https://www.mathlearningcenter.org/resources/apps</a>                        | K-5                    |

### Science:

| Website   | Log-in Information                                   | Suggested Grade Level: |
|---|--|------------------------|
| <a href="https://pbskids.org/">https://pbskids.org/</a>   | N/A  | PK-2                   |
| <a href="https://www.nasa.gov/kidsclub/index.html">https://www.nasa.gov/kidsclub/index.html</a> | N/A  | K-6                    |
| <a href="http://www.sciencekids.co.nz/">http://www.sciencekids.co.nz/</a>                       | N/A  | K-6                    |
| <a href="https://kids.nationalgeographic.com/">https://kids.nationalgeographic.com./</a>        | N/A  | Any                    |
| <a href="https://pebblegonext.com/">https://pebblegonext.com/</a>                               | username: <b>vpearson</b><br>password: <b>school</b> | 3-6                    |
| <a href="https://www.pebblego.com/">https://www.pebblego.com/</a>                               | username: <b>research</b><br>password: <b>school</b> | K-6                    |

### Unified Arts:

| Website   |
|---|
| <a href="http://www.classicsforkids.com">www.classicsforkids.com</a>        |
| <a href="https://www.mydso.com/dso-kids">https://www.mydso.com/dso-kids</a> |
| <a href="https://family.gonoodle.com/">https://family.gonoodle.com/</a>     |

# Menu of Learning Activities

|   |  |  |  |
|---|--|--|--|
| <p>Read for at least 30 minutes and write a journal response. What conflicts are characters facing in your book? How are characters responding to these challenges?</p> | <p>Consider your energy consumption today. What energy have you used today? What were your energy sources?</p> | <p>With permission from an adult, explore a topic on <a href="https://kids.nationalgeographic.com">https://kids.nationalgeographic.com</a>. Write down 5 facts that you learned and share them with someone.</p> | <p>Read the Mindfulness Task Cards (1-A) and select at least one to try. Then try coloring after reading a Mindfulness Mantra.</p>                   |
| <p>Geometry is all around us! Create an illustration of all the geometry you see inside and out. Label at least 6 different items with geometry terms.</p>              | <p>Make up a song about your day. Perform it for someone.</p>  | <p>Do you like Penguins? Be sure to read the article "When Giant Penguins that Roamed the Earth". Answer the quiz questions at the end of the article.</p>   | <p>With an adult, go on a nature walk. Find examples of where erosion has occurred. Why do you think the erosion happened?</p>                       |
| <p>Take time to stretch. Then work on fitness by jogging in place, doing curl-ups and push-ups.</p>   | <p>Learn something new about someone. Complete the Interview Activity (1-C).</p>                               | <p>Help around the house: clean your room, fold laundry, do the dishes, or sweep/vacuum.</p>   | <p>Create a poem about an animal. Use some sensory words to provide a description.</p>   |
| <p>With permission from an adult, go to <a href="https://www.abcya.com/games/4/numbers">https://www.abcya.com/games/4/numbers</a> to play a math game.</p>              | <p>Design the ultimate sled. Draw it from different angles to show all the unique features.</p>                | <p>Complete at least three Math Challenge (1-D) problems from the worksheet.</p>   | <p>What is renewable energy? Read the article "Types of Renewable Energy". Create and design your own town using renewable energy sources. (1-E)</p> |

# Menu of Learning Activities

|  |   |   |   |
|--|---|---|---|
| <p>Read an independent book for at least 30 minutes. Compare and contrast two characters. Record your response on the Character Worksheet (2-A).</p>   | <p>With permission from an adult, go to <a href="https://www.abcya.com/games/4/numbers">https://www.abcya.com/games/4/numbers</a> to play a math game.</p>  | <p>Respond to the Winter Writing Prompt (2-B) and write about what the world would be like if it were covered in 6 feet of snow.</p>  | <p>Take a few minutes to be mindful. Follow the instructions on the Mindfulness Worksheet (2-C).</p>  |
| <p>Write a letter of appreciation to someone who works in your school. Tell them what you appreciate about them, the difference they make in the school, and thank them for all they do.</p> | <p>With help from an adult, play a game, research a composer, compose a song, or dance to the beat. <a href="http://www.classicsforkids.com">www.classicsforkids.com</a></p>  | <p>Compare the fractions below. Use the symbols <math>&gt;</math>, <math>=</math>, or <math>&lt;</math> to record your comparisons. Draw a picture to illustrate your answer.</p> <p><math>\frac{1}{4}</math> and <math>\frac{5}{8}</math>      <math>\frac{1}{2}</math> and <math>\frac{1}{3}</math></p> | <p>Complete the Math Challenge (2-D) questions. Bonus: see if you can write your own math challenge and have someone at home find the answer.</p> |
| <p>Roll two dice and multiply the result to find the <b>product</b>. Record the product. Do this 25 times. Create a bar graph with the results. What do you notice?</p>                      | <p>Draw a picture of the school mascot. Write a story about an adventure the mascot might have.</p>   | <p>Think about riding a sled. Draw a sketch showing you sledding, labeling where you had the greatest potential energy and where the transfer to kinetic energy occurred.</p>   | <p>Can you label all the continents and oceans? Look at the attached map and give it a try! (2-G)</p>   |
| <p>Landscape Out Your Window - draw a picture of what you see from your window. Use worksheet (2-E) for guidance.</p>  | <p>With permission, visit <a href="https://www.classicsforkids.com/music/instruments_orchestra.php">https://www.classicsforkids.com/music/instruments_orchestra.php</a> to review the instrument families and click to hear each. Do you want to learn how to play an instrument?</p> | <p>Let's Get Moving! Find a comfortable space in your house and follow the instructions on the Let's Get Moving Worksheet (2-F).</p>  | <p>Self-Portrait. Look in a mirror and draw a self-portrait. Include as much realistic detail as you can.</p>                                     |

# Day 1 Worksheets, Writing Prompts and Attachments



## MINDFULNESS TASK CARDS

(1-A)

**MINDFULNESS** 

Mindfulness helps to quiet our minds. What are some things that keep your mind racing? (i.e. worrying, reliving the past, making mental to do lists, etc.)

9

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**MINDFULNESS** 

Gratitude is a mindfulness practice that allows you to experience joy, compassion and appreciation. In this moment, what are you grateful for?

10

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**MINDFULNESS** 

Think about the people in your life that you are grateful for. Who are they and how do you let them know you appreciate them?

11

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**MINDFULNESS** 

When you think about the people in your life you are grateful for, how do you feel? What sensations do you experience in your body? (i.e. my shoulders relax, my heart flutters, etc.)

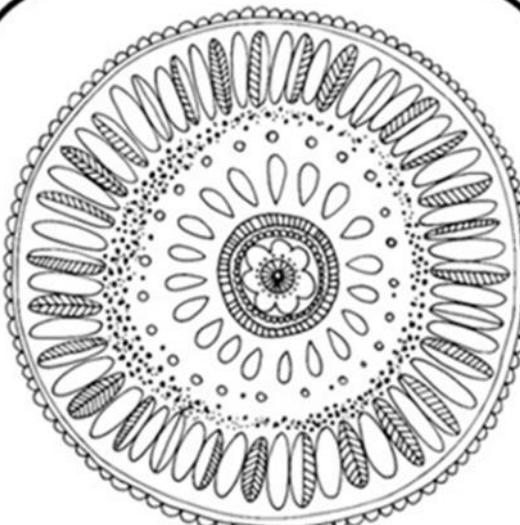
12

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In this moment, I breathe out everything I don't need

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I am in control of my feelings. I choose how I feel

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# When giant penguins roamed the Earth

By Cricket Media, adapted by Newsela staff on 01.14.20

Word Count **639**

Level **610L**



Image 1. Scientists in Antarctica study modern-day penguins, like the emperor penguin pictured here, to learn more about the penguins' giant, prehistoric relatives. Photo by: polarman/Shutterstock

Scientists aren't the only people who make major discoveries! The Hamilton Junior Naturalist Club is a group of 10- to 18-year-olds. Its members have an interest in natural history. They call themselves Junats for short.

In 2006, the Junats went looking for fossils on New Zealand's North Island. A fossil is the preserved remains of plants or animals from long ago. One afternoon, the Junats saw something. It was a penguin fossil. It dated back to 30 million years ago.

## **Operation Fossil Identification**

The Junats' club leader is Dave Matthews. He believes the penguin probably waddled around New Zealand in the Oligocene period. This was a period of time about 34 million to 23 million years ago. The ancient penguin was probably 1.5 meters (5 feet) tall.

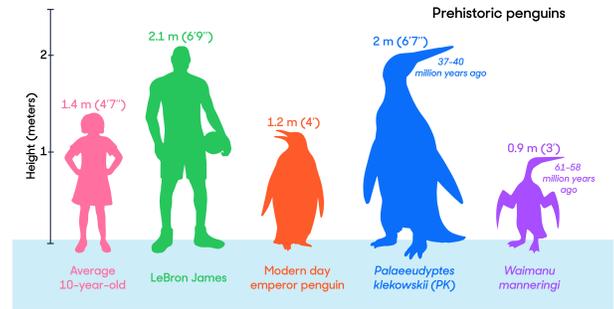
Figuring out the species, or kind, of penguin has been hard. Scientist Daniel Thomas has been studying the fossil. He expects to identify and name the penguin soon.

## Penguin Paradise

Are you surprised that giant penguins once lived in New Zealand? Let's take a closer look.

We'll start about 66 million to 34 million years ago. Earth was quite different then. The ice caps hardly existed. For most of this time, the climate was warmer. Climate is weather over a long period of time. Sea levels fell. Fish thrived. This was great for penguins. They had plenty of food. They enjoyed the warm weather.

Penguins lived in New Zealand during this time. The earliest known penguins lived about 61 to 58 million years ago. One of these penguins was *Waimanu manneringi*. It grew to around 1 meter (3 feet) tall. Its long, pointed beak was great for fishing.



## Ancient Giants

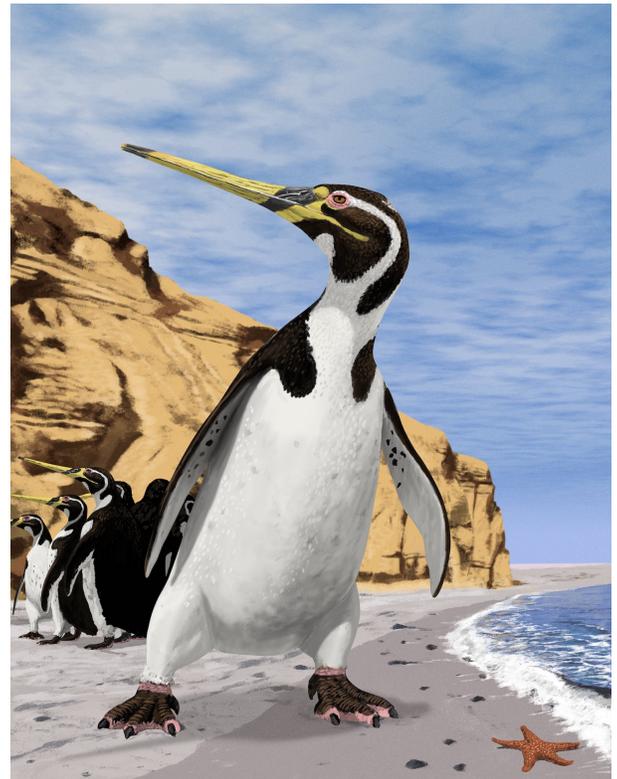
Fast forward to the real giants, *Palaeudyptes klekowskii*. Let's call them PK for short. These penguins lived in Antarctica, too. They lived around 37 million to 40 million years ago. PK grew to over 2 meters (6.5 feet). Today's pro basketball players average just an inch or so taller. What a penguin!

Today, it stays near freezing in summer in Antarctica. It drops below minus 34 degrees Celsius (minus 30 degrees Fahrenheit) in winter. But ancient penguins did not walk across icebergs. Giant penguins did very well during the early Eocene. That was about 50 million years ago. Scientists have learned that Antarctica was as warm as 20 degrees C (68 degrees F) then. Eventually, Antarctica began to change. The warm, wet climate became colder.

## Changing With The Times?

Scientists think giant penguins had few predators. Whales and seals began to evolve. Penguins became an important food source for them. That made it harder for these giant birds to stay alive. In addition, climate change made it even harder for penguins to survive. The Earth grew warmer. The last of the giant penguins died millions of years ago. They went extinct.

Earth's climate has changed naturally during history. The environment has changed as well. But over the past hundred years, climate change has happened more quickly. The result is warmer weather. It could have a huge effect on life on Earth.



Today's penguins prefer freezing cold oceans. But the oceans are getting warmer. As a result, there are five kinds of penguins that may go extinct. We can take steps to reduce major climate change. It will not bring back the giant penguins, but it might save today's endangered penguins.

## Quiz

1 Read the paragraph below from the section "Changing With The Times?"

*Scientists think giant penguins had few predators. Whales and seals began to evolve. Penguins became an important food source for them. That made it harder for these giant birds to stay alive. In addition, climate change made it even harder for penguins to survive. The Earth grew warmer. The last of the giant penguins died millions of years ago. They went extinct.*

Which question is answered in this paragraph?

- (A) What did giant penguins eat?
- (B) Where did giant penguins live?
- (C) Why did Earth's climate change?
- (D) Why did giant penguins go extinct?

2 Which sentence explains where the Junats found a penguin fossil?

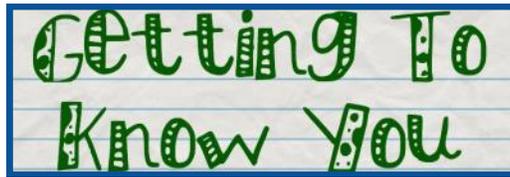
- (A) The Hamilton Junior Naturalist Club is a group of 10- to 18-year-olds
- (B) They call themselves Junats for short.
- (C) In 2006, the Junats went looking for fossils on New Zealand's North Island.
- (D) It dated back to 30 million years ago.

3 What does the section "Penguin Paradise" show the reader?

- (A) the reasons penguins thrived millions of years ago
- (B) the size of the biggest penguin to ever live
- (C) the scientists who discovered a penguin fossil
- (D) the ways Antarctica's climate is changing today

4 What information does Image 2 support?

- (A) which animals hunt penguins
- (B) how big different penguins were
- (C) what temperature penguins like
- (D) where to find penguin fossils



**Learn more about a family member through this interview activity.**

1. Think of a relative you would like to interview.
2. Brainstorm 10 questions that you could ask him/her below. When developing questions, try to think of questions that you **do not** already know the answers to.
3. Set up a time to interview your relative.
4. Record his/her answers on a separate piece of paper.

**Who will you interview?** \_\_\_\_\_

**Why do you want to interview this person?** \_\_\_\_\_

**Think of 10 questions to ask this person to help you learn new things about him/her.**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

*What surprised you most about what you learned about this person?*

# Day 1 Worksheets, Writing Prompts and Attachments



## MATH CHALLENGE

(1-D)

Use scrap paper to work on the solutions to the following problems. Try to complete at least 3.

On a snow day, 8 kids from the neighborhood gathered to build snowmen. The kids used two buttons as the eyes on each snowman. 7 more kids joined to make snowmen and used buttons for the eyes, too. How many buttons were used to make the snowmen?

Sheena baked 112 cookies. She kept 16 cookies at home for her family and shared the rest evenly with her 8 friends. How many cookies did each friend get?

It snowed 3 inches each day for a week. By the next Monday, 6 inches had melted away. How many inches of snow were still on the ground?

9 children went outside to play in the snow. They wore their gloves. Isaiah and Michael each lost a glove while outside. How many gloves did the children bring back inside?

4 groups of people went to a restaurant. Each group had 5 people in it. Everyone ordered a cup of hot chocolate. Rebecca, Malaki, and Jeffrey each ordered an extra cup of hot chocolate. How many cups of hot chocolate did the people drink that day?

The Smith family went ice skating on a frozen lake. The 2 parents and 4 children each had ice skates. They brought an extra pair of ice skates in case anyone else wanted to join them. How many ice skates did the family bring?

# Types of renewable energy

By National Geographic Society, adapted by Newsela staff on 02.12.20

Word Count **554**

Level **610L**



Wind turbines (left) and solar panels (right) create electricity. Photo by: Christoph Burgstedt/Science Source

The wind, the sun and Earth give us energy. This energy does not ever get used up. This is called renewable energy.

## **Solar Energy**

Solar energy comes from the sun.

One type of solar energy uses technology. For example, solar cells or PV cells are panels that capture sunlight. They then generate electricity.

Other types of solar energy use natural sunlight for heat. One example is building a house that faces the sun. More sun means more heat.

Solar cells work well. But they cost a lot.

Solar power cannot be used as the only power source in a community. That is because the sunlight we get depends on where we live, the season and the time of the day.

## **Wind Energy**

We get wind energy from wind turbines. These are towers with two or three blades at the top. The wind turns the blades. The blades turn a generator inside the tower. The generator creates electricity. Turbines do not release pollutants into the air.

Groups of wind turbines are known as wind farms. Wind farms can be found near farms, mountains and even in the ocean.

If winds are steady, we get cheap electricity. But wind speed depends on where we live and the time of the day. So we cannot rely on it fully. Also, wind turbines are dangerous for bats and birds. They can crash into them.

## **Geothermal Energy**

The center of the earth is very hot. Geothermal energy makes use of this heat.

We get underground geothermal heat in different ways. One way is heat pumps. Hot water from underground is used to heat buildings. These pumps can also heat sidewalks and even parking lots.

In Iceland, there are large amounts of underground water. Almost 90 percent of people in Iceland use geothermal as an energy source. They heat their homes and businesses.

Another way to use geothermal energy is with steam. In some areas of the world, there is underground steam that naturally rises to the surface. The steam can be piped to a power plant.

## **Biomass Energy**

Biomass is material that comes from plants or animals. Plants create energy from the sun. It happens in a process called photosynthesis. This energy is stored in the plants even after they die.

Trees, branches and recycled paper are sources of biomass. Other sources of biomass are manure and crops such as corn, soy and sugar.

We get energy from biomass by burning it. Biomass can also be made into biofuel. It can help power cars and trucks.

Biomass can be stored and used when it is needed. But we need a lot of land and pesticides to grow biomass.

## **Hydroelectric Energy**

Hydroelectric energy is made by flowing water. Most hydroelectric power plants are on dams.

Dams block the river and create a manmade lake. Some water flows out of the dam through tunnels. This water turns turbines. This creates electricity.

Hydroelectric energy does not cost much. Also, the dam does not depend on the weather and time of day.

But the man-made lakes can hurt the land around it. It can drown entire ecosystems and towns.

## **Other Renewable Energy Sources**

Scientists and engineers are working on other renewable energy sources. One way uses ocean tides to generate electricity. Another way creates fuel from algae.



# **Renewable Energy: Design Your Own Town**

**Directions: Read the article on renewable energy. In the space below, design your own town. What energy sources would it use? Be sure to label them.**

# Day 2 Worksheets, Writing Prompts and Attachments



## CHARACTER COMPARISON WORKSHEET

(2-A)

\_\_\_\_\_

Title and Author

**Character 1:**

**Character 2:**

**CHARACTER SIMILARITIES**

**CHARACTER DIFFERENCES**

The worksheet is designed for comparing two characters. It starts with a line for the title and author. Below that are two boxes for character names. Arrows from these boxes point to a large box for similarities. Below that are two boxes for differences, with four double-headed arrows between them to indicate comparison.

# Day 2 Worksheets, Writing Prompts and Attachments



## WINTER WRITING PROMPT

(2-B)



Respond to the following prompt: Imagine that the entire world is covered in 6 feet of snow! What does the world look like? How do the kids deal with the snow? The adults? How does the deep snow affect the animals, birds, and fish?



## MINDFULNESS

(2-C)

Take a few minutes to be mindful. Find a comfortable spot to sit or lay down. Close your eyes and take several deep breaths. Think about what you feel, hear, smell. When you're finished, quietly color in the mandala below.

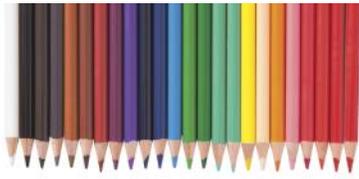


# Day 2 Worksheets, Writing Prompts and Attachments



## MATH CHALLENGE

(2-D)

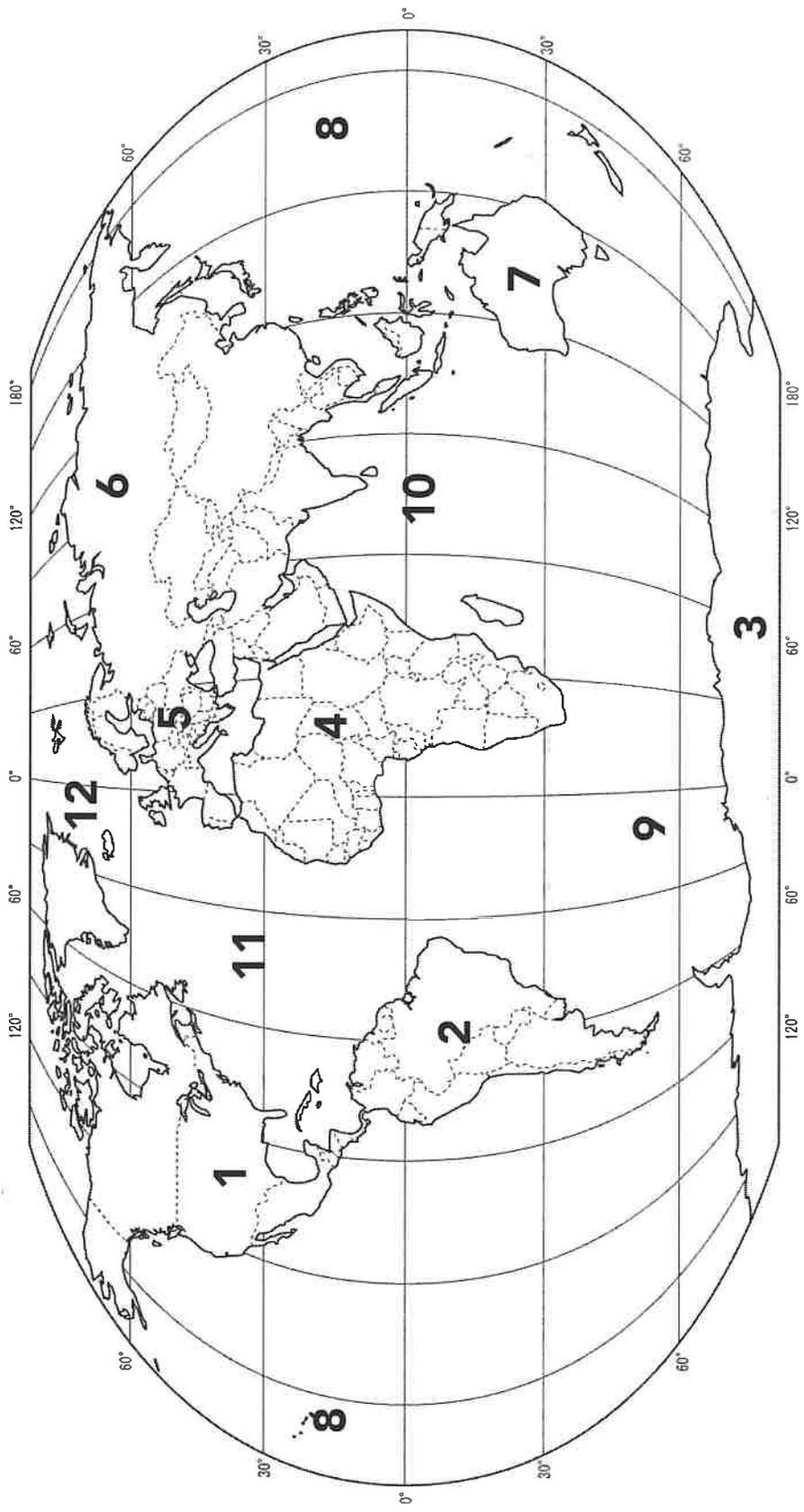


There are 6 tables in Mrs. Potter's art classroom, with 4 students sitting at each table. Each student has a box of 10 colored pencils. How many colored pencils are at each table? How many colored pencils are there in total?

What if there were 6 students at each table and each student had a box of 12 colored pencils? How many colored pencils are now at each table, and how many colored pencils would there be in total?

**BONUS:** Write your own math challenge. Give it to someone else in your house and see if they can find the answer(s).

# CONTINENTS AND OCEANS



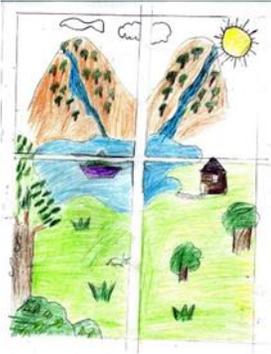
Directions: Write the number on the line beside the name of each ocean or continent.

- \_\_\_\_\_ Southern Ocean      \_\_\_\_\_ Asia      \_\_\_\_\_ Australia      \_\_\_\_\_ Indian Ocean
- \_\_\_\_\_ Antarctica      \_\_\_\_\_ Atlantic Ocean      \_\_\_\_\_ North America      \_\_\_\_\_ Arctic Ocean
- \_\_\_\_\_ Africa      \_\_\_\_\_ Europe      \_\_\_\_\_ South America      \_\_\_\_\_ Pacific Ocean



## LANDSCAPE FROM YOUR WINDOW

(2-E)



*Use materials of your choice (crayons, pencils, paint, clay) to create a picture of the view from your window. What do you see? What is happening? How can you tell? What details can you include in your artwork to describe what you see? Find a creative way to show what is happening outside your window. Bring your artwork to school to share with your class.*

# Day 2 Worksheets, Writing Prompts and Attachments



**LET'S GET MOVING!**

**(2-F)**

*Find a comfortable place in your house and do the exercises listed below.*



## **Push-Ups**

Get in a push-up position with your arms straight and elbows locked. Try holding yourself in this position for 60 seconds.

## **Shoulder Tap**

While in the push-up position, try to touch your right hand to your left shoulder, then your left hand to your right shoulder. Repeat 20 times.

## **Ab Crunches**

Lay on the floor and do 20 abdominal crunches.

Repeat this entire routine one more time.