



*Winchester Public Schools*

*6<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> (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> (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:**

<b>Website</b>	<b>Log-in Information</b>	<b>Suggested Grade Level:</b>
<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> password: <b>school</b>	3-6
<a href="https://www.pebblego.com/">https://www.pebblego.com/</a>	username: <b>research</b> password: <b>school</b>	K-6

**Unified Arts:**

<b>Website</b>
<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>Write a realistic fiction story. Include realistic characters, settings, and conflicts. Convey meaning through the use of relevant descriptive details, dialogue, tension, pacing, and symbolism in well-sequenced events.</p>	<p>Data Charting and Graphing: Use the Data Charting and Graphing template (1-A) to make a data table and create a graph of objects you can find in or around your house.</p>	<p>Listen to composition by a composer of your choosing. Write a short essay describing the composition. Write 1-2 paragraphs about the composer and what you learned from your research. <a href="https://www.classicsforkids.com/">https://www.classicsforkids.com/</a></p>	<p>Need more information on "Fancy Cups"? Design your own experiment. What material will keep ice from melting for the longest time? Bring your results back to school.</p>
<p>Ask permission from an adult to visit <a href="https://www.abcya.com/games/6">https://www.abcya.com/games/6</a> to play a word game.</p>	<p>Read an independent choice text for at least 30 minutes and respond to the following prompt: What themes are emerging in the novel and what evidence supports your response?</p>	<p>Ask permission from an adult to visit <a href="https://www.abcya.com/games/6/numbers">https://www.abcya.com/games/6/numbers</a> to play a math game.</p>	<p>Landscape From Your Window. Follow the instructions (1-C) and draw a picture of what you see from your window.</p>
<p>Read the article "What will humans eat on Mars?". Answer the quiz questions at the end of the text.</p>	<p>Pick a recipe and show what the recipe would be if you wanted to double it, triple it, or only make half. Record the original amounts as well as the new amounts you have calculated.</p>	<p>With permission from an adult, visit <a href="https://www.ixl.com/ela/games/grade-6">https://www.ixl.com/ela/games/grade-6</a> and pick 2 language arts activities to complete.</p>	<p>Choose and complete one or more activities from <a href="https://www.classicsforkids.com/">https://www.classicsforkids.com/</a>.</p>
<p>Calculate the surface area and volume of two "rectangular prism" objects from your home. Then, calculate the perimeter and area of two square, rectangle or triangular objects.</p>	<p>With permission, go online and watch a brief video on Elements of Art: Color Theory. Then answer the questions listed on the worksheet (1-E)  <a href="https://www.pbslearningmedia.org/resource/06ec86f8-58a8-4906-8e2e-faa31102c6dd/elements-of-art-color-kqed-art-school/">https://www.pbslearningmedia.org/resource/06ec86f8-58a8-4906-8e2e-faa31102c6dd/elements-of-art-color-kqed-art-school/</a></p>	<p>Interview a family member and ask 5 questions about their heritage/culture OR about a country they have visited. What was the most interesting thing you learned? What surprised you most?</p>	<p>Let's Get Moving: Work on your fitness! Pick and complete at least three activities from the fitness worksheets (1-F) Instructions and diagrams are included.</p>



# Menu of Learning Activities

<p>Read the article "Noise-Canceling Headphones: The Secret Survival Tool for Modern Life". Write a paragraph that explains the central idea of the article using at least 3 details from the article to support your response.</p>	<p>Cute or Ugly animals? Which should we protect? Read the article, "Is a Sad-Eyed Panda Worth Saving More Than a Slimy Salamander?" Answer the quiz questions at the end of the text.</p>	<p>Snowfall Totals Data: Follow the instructions on your worksheet (2-A) to determine which cities have the most snowfall and explain why, using proximity to water, latitude, and altitude in your reasoning.</p>	<p>Letter Game: Vowels are worth \$50 each and consonants are worth \$40. Can you make a word worth exactly \$200? \$600?</p>
<p>Choose and complete one or more activities from <a href="https://www.classicsforkids.com/">https://www.classicsforkids.com/</a>.</p>	<p>Using words and pictures create a collage. Title the collage and write a one-paragraph explanation about the story of the work.</p>	<p>Pretend you don't have internet access. Take a Digital Detox and play a board game, card game, do a puzzle, color, create a paper snowflake. How long did you last? Write about how you felt afterward.</p>	<p>With permission from an adult, visit <a href="https://www.ixl.com/ela/grade-6">https://www.ixl.com/ela/grade-6</a> and pick 2 language arts activities to complete.</p>
<p>Solve the "Plate Tectonics" puzzle to discover what Earth looked like 220 million years ago. See attachments pages 4, 5, and 6.</p>	<p>Make a list of food items and assign each item a price. Ask someone to "pretend" to make a purchase. Your cash register is broken. Use pencil and paper to total the items. How much change would you owe? Write your transactions down.</p>	<p>Go to <a href="https://www.choosemyplate.gov/">https://www.choosemyplate.gov/</a> and plan a nutritious meal for either breakfast, lunch or dinner. With permission from an adult, assist in making the meal.</p>	<p>Read independently for at least 30 minutes and respond to one of the following prompts: What motivates the main character? or If your character were to be given an award, what award would it be and why?</p>
<p>Elements of Art: Line</p> <p>Watch the video and complete the activities listed on the worksheet (2-D).</p> <p><a href="https://www.pbs.org/video/art-school-elements-art-line/">https://www.pbs.org/video/art-school-elements-art-line/</a></p>	<p>BONUS: Design your own activity. What are the goals and learning expectations of your activity? What content area(s) does it represent? Have someone in your family complete your activity.</p>	<p>Write your own 15-minute exercise routine. Workout and have fun!</p>	<p>Ask permission from an adult to visit <a href="https://www.abcy.com/games/6/numbers">https://www.abcy.com/games/6/numbers</a> to play a math game.</p>

## Day 1 Worksheets, Writing Prompts and Attachments



## DATA CHARTING AND GRAPHING

**(1-A)**

Make a data table **and** create a BAR graph of something at home. Be sure to include a title, labels and the appropriate scale to accurately record what you found.

Here are some examples of things you could represent with a graph:

- The different colors or different shapes in a handful of Legos
- The number of each color of M&M's found in one bag of M&M's
- The amount of snow accumulations or temperatures at different times of the day
- The number of different types of electronic devices that you can find in your house

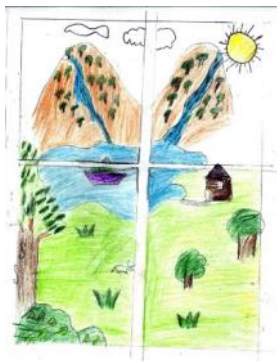
This image shows a full page of blank graph paper. The grid consists of thin, light gray horizontal and vertical lines that intersect to form small squares across the entire surface. There are no margins, text, or other markings on the paper.

**Data Table:**

# Day 1 Worksheets, Writing Prompts and Attachments

## LANDSCAPE FROM YOUR WINDOW

(1-C)



*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.*

**Added Challenge:** After you've created your artwork, write about the view from your window using the same prompts listed above.

# What will humans eat on Mars?

By Smithsonian, adapted by Newsela staff on 03.10.20

Word Count **1,019**

Level **890L**

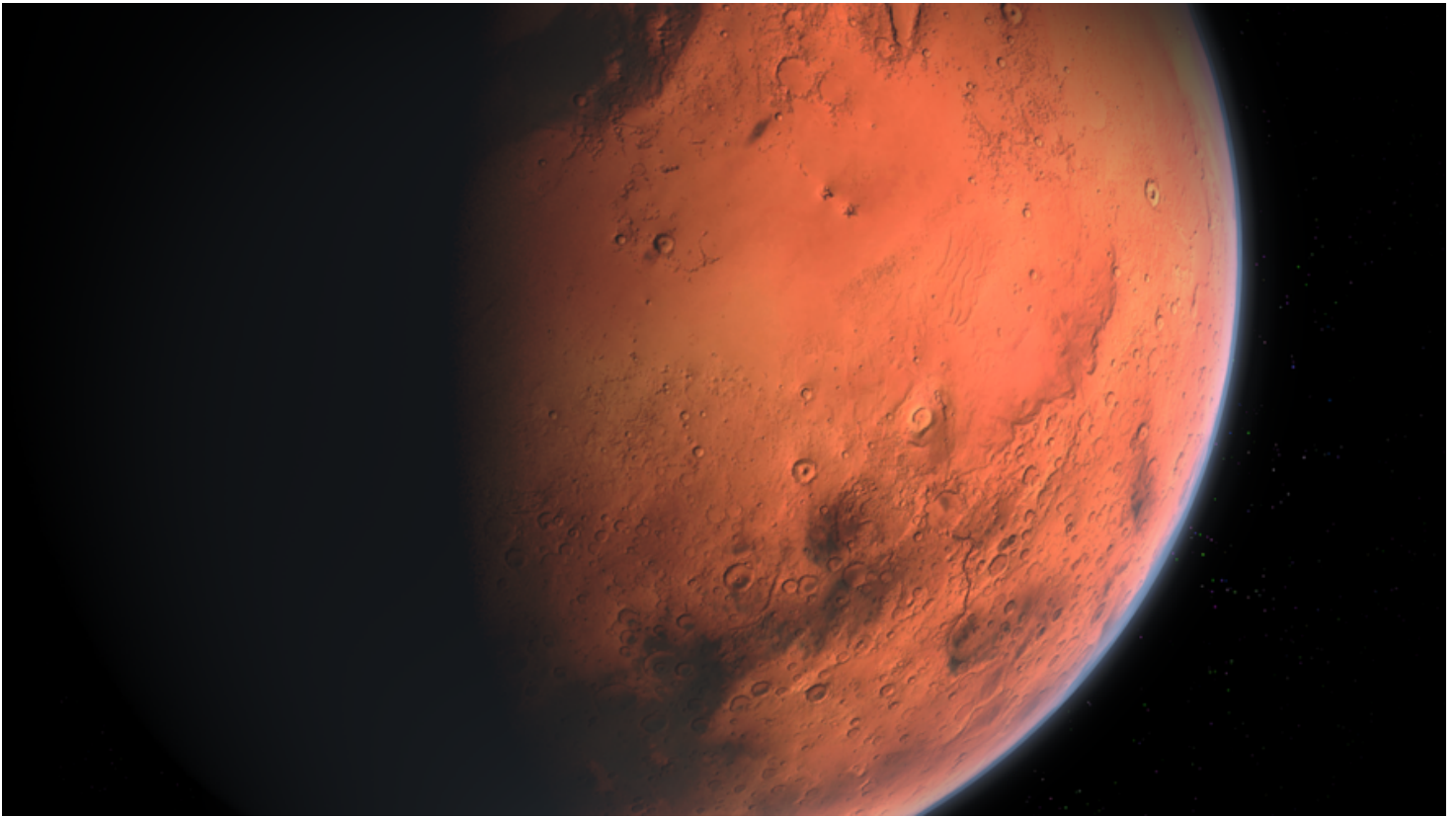


Image 1. Scientists at the University of Central Florida have modeled a path toward self-sufficiency for one million settlers of Mars over the course of 100 Earth years. Image credit: Aynur Zakirov/Pixabay

In 2002, entrepreneur Elon Musk founded a private space transportation company called SpaceX. In 2019, Musk said that space travel could be a reality very soon. He also thinks a self-sustaining city on Mars is not far off.

Meanwhile, scientist Kevin Cannon and his team at the University of Central Florida are studying how to feed humans if they settle on Mars. In their recent paper, Cannon and Daniel Britt created a model. They predicted how one million Mars settlers would support themselves on the planet for 100 Earth years. Smithsonian magazine spoke to Cannon about their vision.

## **What inspired you to consider feeding one million people on Mars?**

I have been working on a lot of projects related to space resources. We're interested in using local materials on the moon or Mars to develop space. For humans to settle on Mars, you'd need oxygen, water, construction material and food. Food is one of the most challenging things to produce on Mars.

## **What practical factors did you consider when thinking about food production on Mars?**

An important factor is the amount of land that you require. On Mars, when you think about land, you're talking about building a structure that's closed off to the outside world. You have to make sure the pressure, heat and light inside are just right. This structure would protect you from the harsh environment on Mars. There is almost no atmosphere, and it's also very cold.

### **How did you determine which food sources would be well-suited for life on Mars?**

We started with plants. We went a bit beyond that to some protein sources and arrived at insect-based foods. These foods turned out to be very efficient for Mars. We are also exploring cellular agriculture.

### **How does cellular agriculture work?**

Cellular agriculture is the production of meats and other products from cell cultures. First, you extract cells from an animal. Then, you grow them in a nutrient solution. You build the cells in a supporting structure. It gives you the texture of different meats. It's a sustainable way of producing animal protein. Cellular agriculture is more ethical -- it does not involve raising animals in questionable conditions.



### **Could you elaborate a bit more about insect protein?**

Insect protein is not really a part of culture or diet in North America or Europe. However, two billion people eat insects as part of their diet on a regular basis. It turns out to be a very good source of protein. It is also sustainable, which means it does not require a lot of land or a lot of water. Insect protein makes good use of resources.

Of course, there is a little bit of a gross factor involved in eating insects. But people can grind up crickets into flour and put them into cookies or chips. This way, you can hide them and get away from just chomping down on whole insects.

### **What kind of fruits or vegetables would be on the menu?**

Right now in space, the astronauts have a little garden. They're able to grow things like lettuce, tomatoes and peppers. But you're not going to be able to feed a large population on those very low-calorie vegetables. Other crops, such as corn, wheat and soy, have enough calories to support a growing population.

### **What kinds of technologies did you find were best suited for food production on Mars?**

Food production needs to be as automated as possible. It would free up people's time to do more important things. A lot of companies are trying to include robots in farming and insect production.

Another technology that would be useful on Mars is genetic modification. It involves changing the genes of a plant to get certain desirable features. It's important for improving crops and making them more resilient in the harsh Martian environment.

### **What are some other challenges posed by the conditions on Mars?**

Whenever you see an artist sketch of a Mars base, you see greenhouses everywhere. But this is not entirely accurate -- you just don't get enough sunlight at the surface of Mars because it is farther away from the sun. A greenhouse might actually not make sense on Mars. You might be better off growing the plants and producing other foods in tunnels underground.

### **Where would the water come from?**

We have a better understanding about the water on Mars. It is mostly locked up as ice underground. It's also found in certain minerals like clays and salts. The water is actually held within the mineral structure, so you could heat the minerals up and evaporate the water. Once you remove that water, it is pretty easy to reuse that water over and over.

### **Based on the results of the study, would you advocate for a human settlement on Mars?**

Elon Musk's space transportation company, SpaceX, is already building the ships that are going to take cargo and then people to Mars. We are already set down that path, and the question is going to be: Who gets to go? Is this going to be space agencies or tourists? How is a settlement or a city going to build up? It is definitely possible in the near future.

### **How could this knowledge apply to life on Earth?**

The conditions on Mars -- the lack of atmosphere, the cold -- force you to produce food in a way that is more sustainable than the way we do it on Earth. So, that means moving away from factory farming and large scale production of dairy and animal protein.

It also means thinking about alternatives like insects and cellular agriculture. These alternatives are more sustainable than what we are currently doing on Earth. Developing these practices for Mars could help us move to a more responsible way of producing food here, too.

## Quiz

- 1 Read the section "Could you elaborate a bit more about insect protein?"
- Select the sentence from the section that suggests that consuming insect protein is efficient.
- (A) Insect protein is not really a part of culture or diet in North America or Europe.
  - (B) It is also sustainable, which means it does not require a lot of land or a lot of water.
  - (C) But people can grind up crickets into flour and put them into cookies or chips.
  - (D) This way, you can hide them and get away from just chomping down on whole insects.
- 2 Which sentence from the article shows the MAIN problem Cannon is trying to solve?
- (A) Food is one of the most challenging things to produce on Mars.
  - (B) But you're not going to be able to feed a large population on those very low-calorie vegetables.
  - (C) Food production needs to be as automated as possible.
  - (D) It is mostly locked up as ice underground.
- 3 What is MOST likely the reason the author included the information about sustainable farming in the final section?
- (A) to argue that farming on Mars could be unsuccessful
  - (B) to suggest that animals could be transported to Mars
  - (C) to show how ideas about farming on Mars could benefit Earth
  - (D) to emphasize that colonies on Mars will require large scale production

- 4 Read the selection below.

*Elon Musk's space transportation company, SpaceX, is already building the ships that are going to take cargo and then people to Mars. We are already set down that path, and the question is going to be: Who gets to go? Is this going to be space agencies or tourists? How is a settlement or a city going to build up? It is definitely possible in the near future.*

Why did the author include information about Elon Musk?

- (A) to introduce Elon Musk and his goals to the reader
- (B) to suggest that Elon Musk is a visionary inventor
- (C) to reveal when Mars colonization might begin
- (D) to develop an idea about who will help colonize Mars



# Day 1 Worksheets, Writing Prompts and Attachments



## ELEMENTS OF ART: COLOR THEORY

(1-E)

**PART ONE:** Watch a brief video and answer the questions below:

<https://cptv.pbslearningmedia.org/resource/06ec86f8-58a8-4906-8e2e-faa31102c6dd/elements-of-art-color-kqed-art-school/>

- What are the Primary Colors?
- What are the Secondary Colors?
- Explain what color variations are used to make a "monochromatic" artwork?
- Choose one word from the video that you aren't familiar with and define it using a dictionary. If there weren't any words you didn't understand, choose one that you think someone else might not know.

**PART TWO:** Analysis of a piece of art. Answer the following questions based on the art you see here:

***Snow Mountain by Henry Hobart Nichols***



- What color scheme is the artist using in this artwork?
- How does the color scheme effect the feeling you get from this artwork?
- If you were painting a landscape, what kind of colors would you use? And why?





## WALL PUSH-UP EXERCISE

**TARGETED MUSCLES:** Arms, shoulders, and chest



1. Face a wall, standing a little farther than arm's length away, feet shoulder-width apart.
2. Lean your body forward and put your palms flat against the wall at shoulder height and shoulder-width apart.
3. Slowly breathe in as you bend your elbows and lower your upper body toward the wall in a slow, controlled motion. Keep your feet flat on the floor.
4. Hold the position for 1 second.
5. Breathe out; slowly push yourself back until your arms are straight.
6. Continue for 10-15 reps
7. Rest 1 minute, then repeat 10-15 more reps.

## CURL-UPS

**TARGETED MUSCLES:** Abdominals



1. Begin by lying flat on the floor on your back with knees bent, heels approximately 18' away from your buttocks and arms extended at your side
2. Raise your head and shoulders off the floor and slide your hands along the floor keeping your elbows locked and feet flat until your fingertips almost reach your heels
3. Return to the starting position (only pausing for ½ second) then repeat this movement until you have done 10-15 reps.
4. Rest 1 minute, then repeat another 10-15 reps.

## STANDARD PLANK

**TARGETED MUSCLES:** The **plank** is one of the best **exercises** you can **do** for your core because it builds isometric strength to help sculpt your waistline (abdominals) and improve your posture. Depending on the type of **plank** you try, you can also engage your back, arms, shoulders, glutes, and hamstrings.



1. Plant hands directly under shoulders (slightly wider than shoulder width) like you're about to do a push-up.
2. Ground toes into the floor and squeeze glutes to stabilize your body. Your legs should be working, too — be careful not to lock or hyperextend your knees.
3. Neutralize your neck and spine by looking at a spot on the floor about a foot beyond your hands. Your head should be in line with your back.
4. Hold the position for 20-60 seconds. As you get more comfortable with the move, hold your plank for as long as possible without compromising your form or breath.
5. Continue for 10-15 reps. Rest 1 minute, then repeat 10-15 more reps.

## BOX JUMPS

During the upward phase of this movement, you'll use your core, glutes, quads, hamstrings, calves, and even arms to propel yourself onto the **box**. When you land during **box jump** workouts, your quads will do most of the work



1. To properly perform a basic **box jump**, stand facing the **box**, feet shoulder-width apart.
2. Bend your knees and swing arms behind you, keeping your back straight. In one explosive motion, swing your arms forward and push off the ground, tucking your knees slightly as you spring up onto the **box**.
3. Repeat this until you have done 10 reps total.
4. Rest one minute then repeat 10 more reps.

# Day 1 Worksheets, Writing Prompts and Attachments

## FOREARM PLANK

**TARGETED MUSCLES:** The **plank** is one of the best **exercises** you can **do** for your core because it builds isometric strength to help sculpt your waistline (abdominals) and improve your posture. And depending on the type of **plank** you try, you can also engage your back, arms, shoulders, glutes, and hamstrings.

1. This variation, one of the most common ways to perform a plank, is slightly easier than holding your body up with just your hands.
2. Place forearms on the floor with elbows aligned below shoulders and arms parallel to your body at about shoulder width. If flat palms bother your wrists, clasp your hands together.
3. Hold the position for 20-60 seconds. As you get more comfortable with the move, hold your plank for as long as possible without compromising your form or breath.

## MOUNTAIN CLIMBERS

An exercise that gets your heart rate up fast, while also firing nearly every **muscle** group in the body—deltoids, biceps, triceps, chest, obliques, abdominals, quads, hamstrings and hip abductors.



1. Start in a plank position with arms and legs long. Beginning in a solid plank is the key to proper form and good results in the **Mountain Climber**. ...
2. Pull your right knee into your chest. ...
3. Quickly switch and pull the left knee in...
4. Continue to switch knees until you have performed 10-20 reps
5. Rest one minute, then perform 10-20 more reps

## HIGH KNEES



How to Do High Knees

Develops strength and endurance of the hip flexors, the **muscles** that lift the **knees** and prevents plodding in the running stride. Develops strength and endurance of the quads. Stretches the hip extensors, which include the gluteal **muscles**. These benefits lead to a longer stride for faster, more efficient running.

1. Stand with your feet hip-width apart. Lift up your left **knee** to your chest.
2. Switch to lift your right **knee** to your chest. Continue the movement, alternating legs and moving at a sprinting or running pace for 30 seconds.
3. Rest one minute, then repeat for 30 more seconds

## JUMPING JACKS

**Target Muscles**— Lats, shoulders, biceps, triceps, inner thighs, hamstrings, quads, calves, and glutes



1. Start standing up with your legs together, a slight bend in knees, and hands resting on thighs.
2. Keeping knees bent, open the arms and legs out to the sides. Arms come above the head and legs wider than shoulders.
3. Close your arms and legs back to your sides, return to start.
4. Repeat until you have performed 20 reps
5. Rest one minute then repeat 20 more reps

## SQUAT JUMPS



A **squat** or **jumping** exercise works numerous **muscles** in the lower body, core, and even the upper body. The major **muscles** used are the quadriceps, hamstrings, gluteals, lower back and abdominals.

1. Stand with your feet shoulder-width apart.
2. Start by doing a regular squat, then engage your core and jump up explosively.
3. When you land, lower your body back into the squat position to complete one rep. Land as quietly as possible, which requires control.
4. Do two sets of 10 reps.

# Noise-canceling headphones: the secret survival tool for modern life

By The Guardian, adapted by Newsela staff on 03.03.20

Word Count **874**

Level **950L**



Noise-canceling headphones do more than let people listen to music. They have microphones that pick up background noise. Then, they release sound waves that cancel out the background noise. This results in less noise and more silence for the person wearing the headphones. Photo: GDj/Pixabay

On public transport, using the noise-canceling feature will soften the roar of engine and traffic. In the office or at school, it gets rid of the constant chatter and limits interruptions. Many people use the state-of-the-art headphones not for music but to tune out the constant hum of city life. It's becoming a modern life survival tool.

## **Terrific For Reducing Urban Noises**

Matt Thomas, an animator in London, is a convert to using his headphones for quiet and not music. He discovered he could use the silencing feature on its own by accident. One day, his music cut out on the subway. "It was like that moment in a film where the sound cuts out and everything goes in slow motion," he says.

Heavy traffic generates noise levels of up to 85 decibels. Being exposed to this level of noise for several hours a day can harm our ears. Experts say that it is loud enough to cause permanent

hearing damage. Underground trains can pass the 100 decibels mark when roaring around a loud corner.

Thomas listens to music at work, but often puts his headphones on silent when on public transport. For Johanna Vogel, an economist in Vienna, Austria, it's the opposite. She plays music on the bus but works in silence. Vogel bought her noise-canceling headphones hoping they would help her concentrate in a noisy office. "It's so relaxing," she says. "At first I was doubtful it would make a big difference but now couldn't live without them. In noisy environments I really need some way to create quiet for myself."

Noise damages more than just our ears. Research studies have found links between long-term noise exposure and increased risk of heart attack and stroke. It has also been tied to low mood and difficulties with sleeping and concentrating. Negative effects on mental and physical health can start at just 65 decibels. A refrigerator hums steadily at 40 decibels, and most offices buzz at around 60 decibels.

### Unwanted Noise Has Effect On Stress And Health

Unwanted noise can cause irritation and anger if it feels like an invasion of privacy, says Stephen Stansfeld, a professor of psychiatry in London. He focuses on noise and health. "Having a lot of background noise when you're doing something is tiring. Without noticing, you're putting in a lot more effort in order to block out the noise. So when you shut it out, there's a sense of relief."

Getting worked up about noise can raise stress levels and leads to ill health. "But there's no doubt that even if you're not focused on the noise, it can still have an effect. If you're asleep you may not wake up, but your body is still responding if you hear a loud sound," says Stansfeld. "The body responds to noise as a stressor."

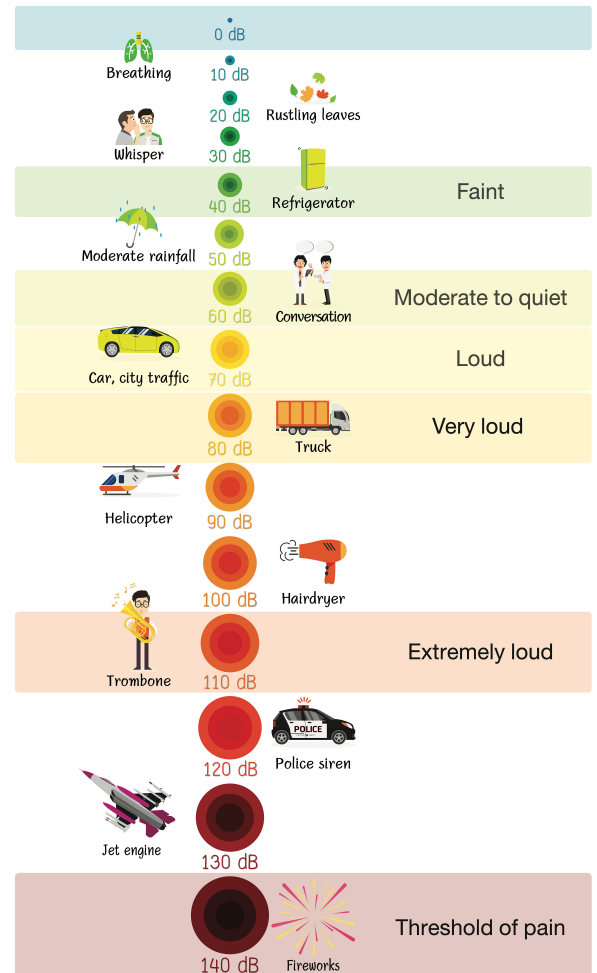
Some people don't notice how much background noise there is until they use noise-canceling headphones. Dishwashers, refrigerators and air conditioners all put out noise in many homes. Using headphones that cancel these sounds can make people feel as if they can hear their thoughts. Then, they start wanting more silence in their lives.

### Sound Waves Cancel Each Other Out

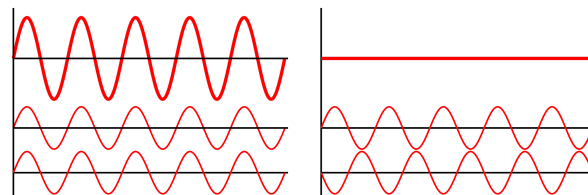
Noise-canceling headphones were originally created for airplane pilots to improve their comfort on long flights. The first versions of headphones that people could buy were also intended for travelers.

## Decibel Scale (dB)

An explanation of the decibel scale and related units for measuring sound and loudness.



The technology is known as active noise-cancellation (ANC). It works by using microphones to pick up noise and cancel it before it reaches the ear. Sounds travel in waves. A crest is the highest point of the wave, while a trough is the lowest. The height from the middle of the wave to the crest or trough is the amplitude. The headset generates a sound with an audio wave that is opposite the one created by the unwanted noise. The crest of the wave from the headset overlaps with the trough of the background noise. The result is that the two sounds cancel each other out.



ANC headphones turn down the volume of the world by about 30 decibels, says Brian Brorsbøl. He works at Sennheiser Communications, a company that produces headphones. The technology is more efficient against low-frequency sounds and can cancel noise between 20 and 45 decibels.

These headphones reduce enough noise that people feel as if they can hear themselves think. When they switch on the quiet, they get a feeling of relief.



# Is a sad-eyed panda worth saving more than a slimy salamander?

By Agence France-Presse, adapted by Newsela staff on 06.07.19

Word Count **759**

Level **880L**



Image 1. A Chinese giant salamander in Hong Kong Ocean Park. Photo by: Best View Stock/Getty Images

Some people really love certain animals. People donate millions to preserve these creatures. Why does this happen with some animals, while others draw little more than disgust?

Moreover, is a sad-eyed panda really worth saving more than a slimy salamander?

The largest amphibian in the world is the Chinese giant salamander. It is not cute.

The salamander weighs as much as an adult human. It has slimy brown skin, a giant, odd mouth, and puny, mistrustful eyes.

It is also one of the world's most endangered species.

Yet, unlike the giant panda, which lives in the same country, the giant salamander rarely makes the news. Why?

**Size, Intelligence, Behavior**

There can be various reasons why we react in certain ways to creatures. Size, intelligence, behavior, how many are left in the wild and how closely an animal resembles humans are examples.

One of the biggest factors is "cuteness," says Hal Herzog, an expert in human-animal relationships.

"Big eyes and soft features" bring out our parental instincts, which relates to our desire to care for other creatures, he says. This is "because they remind us of human infants." The dark rings around pandas' eyes are an example.

"Compare that to the Chinese giant salamander," he said. "It looks like a six-foot-long, 150-pound bag of brown slime with beady little eyes."

The salamanders are a key part of their ecosystem. It's just like how worms are essential to soil health around the streams and lakes they live in — which is just about everywhere.



### **Some Animals Inspire "Yuck"**

Yet, like maggots, rats and snakes, the main instinct they inspire in humans is "yuck."

Graham Davey studies phobias, or human fears, at the University of Sussex's School of Psychology. He says we learn to hate certain creatures at a young age.

"Disgust is a learned emotion. Babies are not born with it ... it's probably transmitted socially, culturally and within families," he said.

Some animals are seen as gross because they look like "primary disgusting things" such as mucus or poop, Davey said. Meanwhile, others are seen as dangerous to the person. That might not even be correct.

"In terms of threat to humankind, disease and illness are bigger than being attacked by an animal," he said.

This might explain why most of us don't find lions and bears awful. They may be dangerous in real life. Still, they are covered with the same type of soft fur that coats cuddly toys.

### **Popular Culture**

Popular culture also has a huge effect on how society views animals.

The movie "Free Willy" caused many to care for the protection of endangered orcas. The film "Arachnophobia" hardly helped spiders' cause.

"Jaws" was a bad look for sharks.

It isn't just the general public who may discriminate against other species.

A study in 2017 found a strong link between society's preferred animals and those most studied in scientific research.

"Maybe that's because it's easier to get money" to study well-known animals, said Frederic Legendre. He's a researcher at France's National History Museum.

Popular species make money in return, according to Christo Fabricius from the World Wildlife Fund. It's a conservation group famous for its panda logo. They work to protect animals and their habitats.

Reptiles, he said, are hard to get people excited about protecting.

Not that favoring certain cute or lovable species is necessarily a bad thing for conservation.

By protecting a species beloved by humans, "We protect their habitat," said Legendre. "Therefore all the organisms within it also benefit."

However, there is another thing to consider. Such species can become a victim of their own popularity.

Images of elephants and tigers, for example, are everywhere — on computer screens, T-shirts and in children's books. One recent study suggested that can fool people into thinking they are more common in the wild than they really are.

### **Most Large Mammals Remain Endangered**

The populations of most large mammals, from hippos to giraffes and gorillas, remain in danger.

Then there's the risk of poaching. This is illegal hunting.

The rarer the species "the more value they provide for traditional medicine, for trophy hunting, and therefore they are poached more often," said Franck Courchamp. He studies how living things relate to one another at France's National Centre for Scientific Research.

So the next time you see a picture of a Chinese giant salamander, think twice. There's more to saving Earth's wild species than looks.



## Quiz

1 Read the section "Some Animals Inspire Yuck."

Which selection from this section supports the conclusion that it might not make sense to be fearful of certain animals like rats and snakes because they seem dangerous?

- (A) Yet, like maggots, rats and snakes, the main instinct they inspire in humans is "yuck."
- (B) Graham Davey studies phobias, or human fears, at the University of Sussex's School of Psychology.
- (C) "Disgust is a learned emotion. Babies are not born with it ... it's probably transmitted socially, culturally and within families," he said.
- (D) In terms of threat to humankind, disease and illness are bigger than being attacked by an animal," he said.

2 Read the following paragraph from the section "Popular Culture."

*A study in 2017 found a strong link between society's preferred animals and those most studied in scientific research.*

Which of the following is an accurate explanation of what this paragraph means?

- (A) A study in 2017 discovered that scientists mostly study animals that people like.
- (B) In 2017, scientists discovered that society prefers animals that have been studied a lot.
- (C) A study in 2017 discovered that a strong link exists between some animals.
- (D) In 2017, scientists started doing research on which animals people like the most.

3 Which two statements are MAIN ideas from the article?

1. *Humans like certain types of animals more than others.*
2. *Some people think the Chinese giant salamander is gross.*
3. *The movie "Free Willy" affected how people felt about orcas.*
4. *Many factors affect how people react to different kinds of animals.*

- (A) 1 and 2
- (B) 2 and 3
- (C) 3 and 4
- (D) 4 and 1

4 Read the following paragraph from the article.

*"Big eyes and soft features" bring out our parental instincts, which relates to our desire to care for other creatures, he says. This is "because they remind us of human infants." The dark rings around pandas' eyes are an example.*

Which statement summarizes the paragraph?

- (A) Pandas are animals that have dark rings around their big eyes.
- (B) People love animals whose looks remind them of human infants.
- (C) People who are parents want to care for other creatures as well.
- (D) Parental instincts help people care for other creatures.

# Day 2 Worksheets, Writing Prompts and Attachments



## SNOWFALL TOTALS DATA

(2-A)

Go to this website to complete the following activity: [www.nerdwallet.com/blog/snowfall-totals-city/](http://www.nerdwallet.com/blog/snowfall-totals-city/)

Take a look at the top ten “snowiest” cities. Look up thee of those cities on a map ([www.whereig.com/usa/states/](http://www.whereig.com/usa/states/))

Why do you think each city has had so much snow?

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Explain how these factors influence the total snowfall in this region. The reason should include at least one of the following: proximity to water, latitude, altitude

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## A Plate Tectonics Puzzle

Solve the puzzle to discover what the Earth looked like 220 million years ago.

1. What's the code? Use the legend to identify the symbols on each island or continent.
2. Puzzle me this. Look at the shapes of continents and islands. What landmasses seem to fit together?
3. Let's rock! Examine the evidence and try to match up landmass boundaries that show similar rock strata, fossilized desert belts, and dinosaur fossils.
4. Hold that Pose. Look over the arrangement of the continents and islands and decide if the position of any of them should change. When you are satisfied with your map of Pangaea, tape or glue it down on the world map.

### Did You Know?

- Tectonic plates are made of both continental and oceanic crust. The land that we see is the continental crust, about 30 kilometers (19 mi) thick. Under the sea, the heavier oceanic crust is much thinner, about 8 to 10 kilometers (5 to 6 mi) thick.
- Plates move about 8 centimeters (3 in) per year. That's about as fast as a fingernail grows in a year!
- The tallest mountains in the world are still growing. About 60 million years ago, the Himalayan Mountains formed when the Indian Plate crashed into the Eurasian Plate. Today the two plates are still colliding and the Himalayas continue to rise.
- Los Angeles sits on the Pacific Plate that is moving northwest and San Francisco sits on the North American Plate that is moving southeast. Moving towards each other at the rate of 5 centimeters (2 in) a year, someday these two cities may be neighbors!


## A Plate Tectonics Puzzle

### LEGEND

1 Europe & Asia

4 Africa

7 Australia

 basalt


 *Plateosaurus*

2 North America

5 India

 landmasses  
BELOW sea level

 desert

 *Phytosaur*

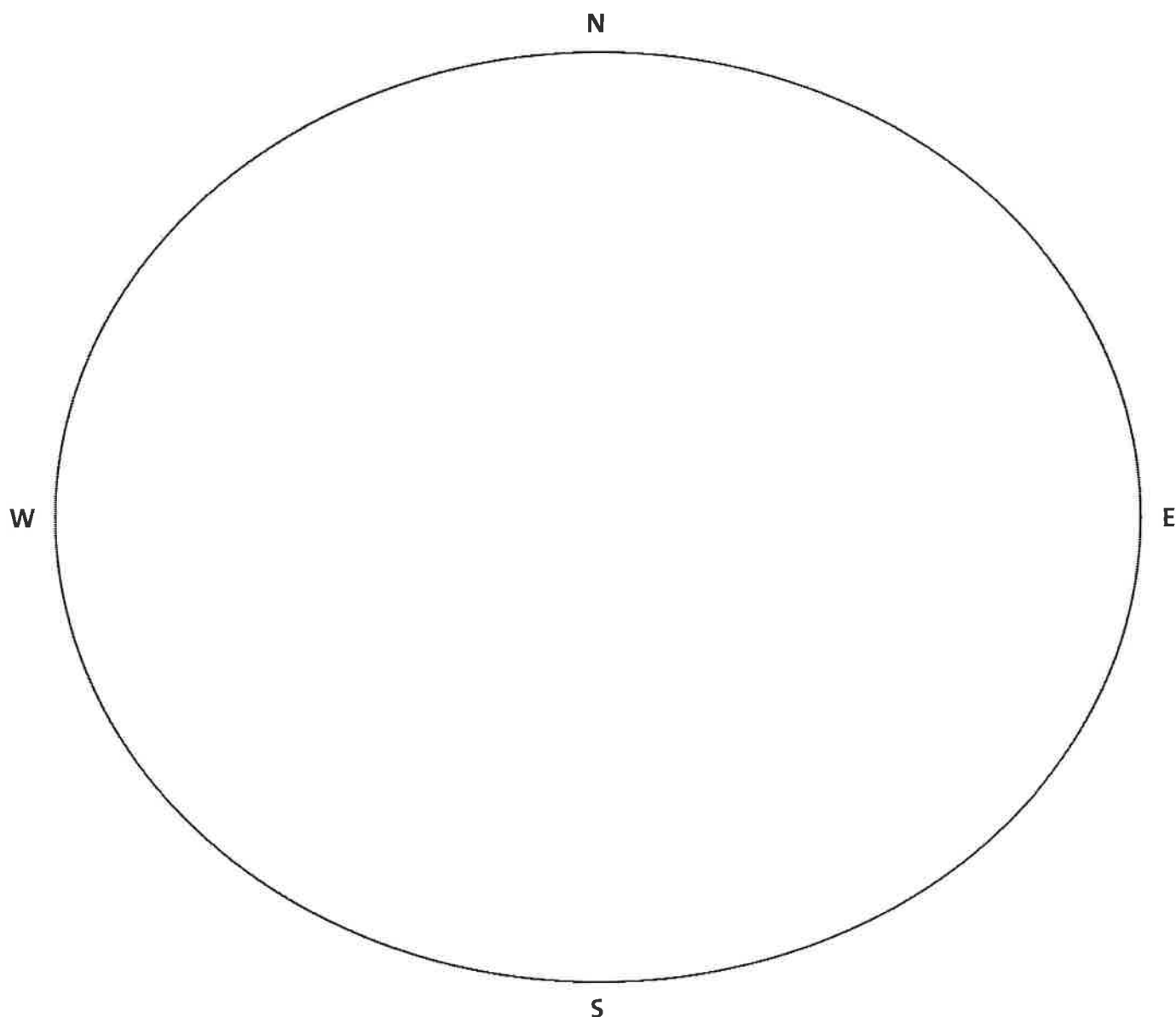
3 South America

6 Antarctica

 landmasses  
ABOVE sea level

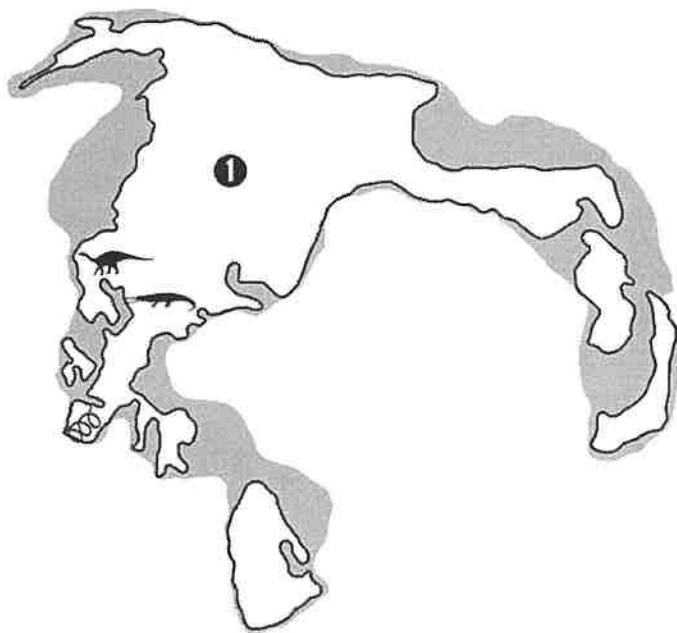
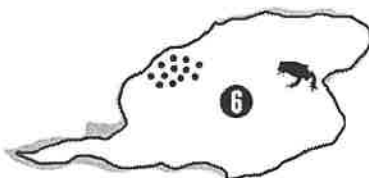
 amphibian

 *Rhynchosaur*



## A Plate Tectonics Puzzle

### LANDMASSES TO CUT OUT





## ELEMENTS OF ART: LINE

(2-D)

**PART ONE:** Watch a brief video and answer the questions below:

<https://cptv.pbslearningmedia.org/resource/18bcb5f9-318a-4c51-9831-3c70051dc536/elements-of-art-line/>

Explain what a line is.

Name three types of line.

Pick a type of line. Identify what type of line did you choose, and explain what kind of feeling that line gives the viewer.

Choose one word from the video that you aren't familiar with and define it using a dictionary. If there weren't any words you didn't understand, choose one that you think someone else might not know.

**PART TWO:** Analysis of a piece of art. Answer the following questions based on the art you see here:

*Self Portrait by Rembrandt Van Rijn*



What qualities do you see in the lines in this work of art?

What do the lines in the piece make you think or feel?

If you were drawing a self-portrait, what kind of lines would you use to represent yourself? And why?