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The lessons and activities included in *Daily Warm-Ups: Science, Grade 5* meet one or more of the following Common Core State Standards. (©Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All right reserved.) For more information about the Common Core State Standards, go to <http://www.corestandards.org/> or visit <http://www.teachercreated.com/standards/>.

Note: Correlations are given for each unit in this book. One or more warm-ups contained within the listed unit meet the following standards.

| Informational Text Standards | |
|---|---------------------------------|
| Key Ideas and Details | Units |
| ELA.RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. | 5, 12 |
| ELA.RI.5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text. | 3, 5, 15, 26, 27 |
| ELA.RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. | 3–5, 7, 10, 15, 18–20, 25–27 |
| Craft and Structure | Units |
| ELA.RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a <i>grade 5 topic or subject area</i> | 1–27 |
| Integration of Knowledge and Ideas | Units |
| ELA.RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). | 1–27 |
| Range of Reading and Level of Text Complexity | Units |
| ELA.RI.5.10 By the end of the year, read and comprehend informational texts, including history/ social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently. | 1–27 |
| Foundational Skills | |
| Phonics and Word Recognition | Units |
| ELA.RF.5.3 Know and apply grade-level phonics and word-analysis skills in decoding words. | 1–27 |
| ELA.RF.5.3a Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. | 1–27 |
| Fluency | Units |
| ELA.RF.5.4 Read with sufficient accuracy and fluency to support comprehension. | 1–27 |
| ELA.RF.5.4a Read grade-level text with purpose and understanding. | 1–27 |
| ELA.RF.5.4c Use context to confirm or self-correct word recognition and understanding, rereading as necessary. | 1–27 |



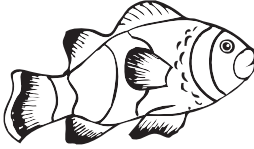





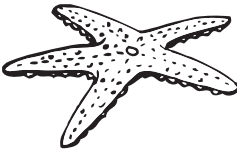


| Writing Standards | |
|---|----------------------|
| Text Types and Purposes | Units |
| ELA.W.5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. | 1–27 |
| ELA.W.5.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. | 10, 17–19, 23, 27 |
| Production and Distribution of Writing | Units |
| ELA.W.5.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. | 1–27 |
| Research to Build and Present Knowledge | Units |
| ELA.W.5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. | 1–27 |
| Range of Writing | Units |
| ELA.W.5.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. | 1–27 |
| Language Standards | |
| Conventions of Standard English | Units |
| ELA.L.5.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. | 1–27 |
| ELA.L.5.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. | 1–27 |
| Knowledge of Language | Units |
| ELA.L.5.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. | 1–27 |
| Vocabulary Acquisition and Use | Units |
| ELA.L.5.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies. | 1–27 |



Name: _____

Directions: A menagerie is a collection of things. Look at this collection of animals described below. Then use what you have read to place these coral-reef creatures in the appropriate category on the chart below.

| | | |
|---|--|--|
| <p>Brain Coral</p> <p>In its shape and design, this coral looks like the human brain.</p>  | <p>Butterfly Fish</p> <p>This fish features a large eye-shaped spot and an unusual shape.</p>  | <p>Clownfish</p> <p>These orange and white fish escape danger by swimming among poisonous sea anemones.</p>  |
| <p>Elkhorn Coral</p> <p>Resembling an elk's antlers, this coral provides a home for many sea creatures.</p>  | <p>Lettuce Leaf Sea Slug</p> <p>Because it is often green and full of folds, this shell-less sea snail looks like a certain vegetable.</p>  | <p>Octopus</p> <p>This eight-legged coral-reef occupant can camouflage itself to look like a bunch of rocks.</p>  |
| <p>Sea Fans</p> <p>These coral look like small fans moving in the water.</p>  | <p>Seahorse</p> <p>One of the smallest fish on the reef, this creature looks like a tiny horse.</p>  | <p>Starfish</p> <p>If this creature — which is not actually a fish—loses an arm, it can regrow it.</p>  |

| Coral-Reef Fish | Coral | Other Animals on Coral Reefs |
|-----------------|-------|------------------------------|
| | | |



Name: _____

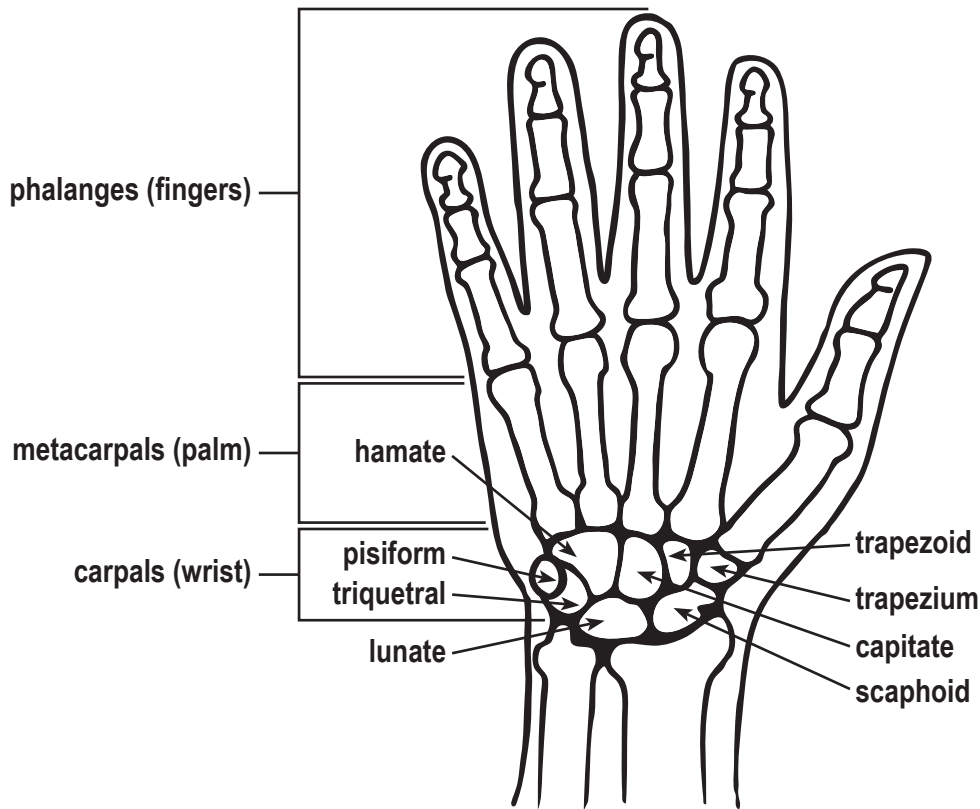
Directions: Study the picture of the bones of the hand. Use it to complete the analogies below.

An analogy is a type of comparison that shows how unlike things can be linked together.

Example: fingers : hand :: toes : foot

To read an analogy, substitute the words “is to” or “are to” for the “:” symbol and “as” for the “::” symbol.

Example: Fingers are to hand as toes are to foot.



1. phalanges : fingers :: carpals : _____
2. carpals : metacarpals :: wrist : _____
3. bones in each finger : 3 :: bones in each thumb : _____
4. thumb : trapezium :: middle finger : _____

Add Them Up !

Now see if you can answer an extra-challenging analogy. (**Hint:** Add up the total number of bones in the fingers, hand, and wrist to answer this question.)

number of bones in an adult body : 206 :: number of bones in an adult hand : _____



Name: _____

When you think of birds, you probably picture a light, graceful animal soaring across the sky. But not all birds can fly. The penguin is one notable bird that is flightless. However, what it lacks as a flier, it more than makes up for as a swimmer. Penguins spend 85% of their time in the water, and they can swim 15 miles an hour with their wings.

Here are some other unusual birds:

- At a weight of up to 350 pounds, the **ostrich** is far too heavy to fly. This African bird can, however, run faster than a horse!
- Which bird has the largest beak? That would be the **Australian pelican**, which uses its 20-inch beak to scoop up fish as it skims over the water.
- At a mere four inches long, the beak of the **sword-billed hummingbird** may seem small, but it is longer than the rest of the bird's body. It is also useful for getting nectar from flowers.
- Having a long, sticky, barbed tongue helps the **green woodpecker** pull insects from wood. Yum.
- Bees and wasps sting, but that's no problem for a **green bee-eater bird**. It catches bees and wasps and then smashes them against hard surfaces in order to remove the stingers. Then it eats them.
- For the **bearded vulture**, there's nothing so tasty as the marrow inside bones. In order to get to it, this bird drops bones from a high tree. It then swoops down and feasts on the insides of the broken bones.
- Could you hear a small, furry vole burrowing under two feet of snow? From as far away as 100 feet, a **great gray owl** can, and it uses this acute sense of hearing to track its prey.

Directions: Use the information from above to answer the following questions.

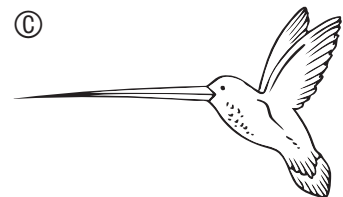
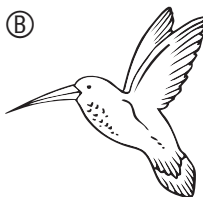
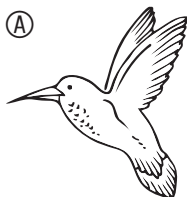
1. Which word means "highly developed"?

| | |
|------------|------------|
| (A) acute | (C) marrow |
| (B) barbed | (D) skim |
2. Which word means "to move quickly and lightly over a surface"?

| | |
|------------|------------|
| (A) acute | (C) marrow |
| (B) barbed | (D) skim |
3. Which word means "containing sharp projections"?

| | |
|------------|------------|
| (A) acute | (C) marrow |
| (B) barbed | (D) skim |

4. Which picture could be of a sword-billed hummingbird?





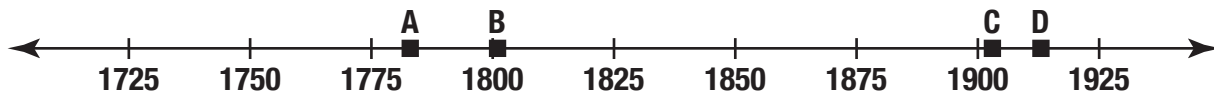
Name: _____

What problem would you like to solve with an invention? Many inventions happened because someone recognized a need for a better tool to accomplish a job. Other inventions came about because the way of doing things needed to be improved.

In centuries past, building things was always a long process. Each item had to be built by hand. Not only did this take time, it also made it difficult or impossible to make exact copies of an object. One person who helped change this was Eli Whitney. In 1801, this American inventor created the idea of interchangeable parts. His invention meant that, for example, a rifle could be built from interchangeable parts. These parts could fit into any rifle of the same design. If one part broke down, a replacement part could be used. This led to increased use of the assembly lines. This way of making products involved having people work in stations along a line. Each person added one part to the product and then moved it along to the next person. A person did the same job over and over again. Each small addition to the product led to the creation of a whole product. While he did not invent the use of assembly lines, an American automobile maker named Henry Ford became famous for using them. In 1913, he used assembly lines to quickly and cheaply manufacture his Model-T cars.

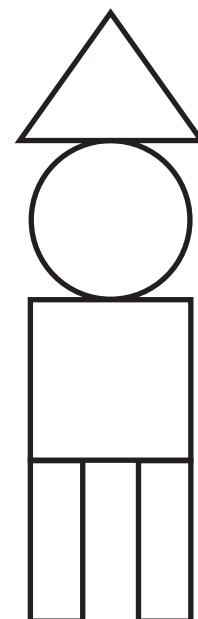
Another area of invention that has seen many solutions and improvements is flight. In 1783, the Montgolfier brothers invented the first lighter-than-air flying machine. Their hot-air balloon flew in Paris, France. After that, many other inventors experimented with flight and made contributions. The Wright brothers were the first to successfully fly an airplane capable of sustained, powered, controlled flight. Their first official flight took place on December 17, 1903. They made four flights on that day, with the final one staying in the air for 59 seconds.

Part 1 Directions: Look at the timeline below. The letters represent people and inventions from the passage above. Write in the names of the inventors on the lines below.



- A. _____
- B. _____
- C. _____
- D. _____

Part 2 Directions: Look at the figure to the right. It is made of five parts: a triangle, a circle, a square, and two rectangles. Use your own words to explain how an assembly line could be used to make many copies of this figure.





Name: _____

A moon is a satellite. This means that it is an object that orbits a planet in space. For us Earthlings, there is one moon to gaze upon in dark night sky. But not all planets have moons, and some planets have a large number of them.

The chart below shows the number of moons for each planet. These numbers reflect the current number, but new moons are occasionally discovered. In fact, Neptune's 14th moon was discovered as recently as 2013.

| Inner Planets | | | | Outer Planets | | | |
|---------------|-------|-------|------|---------------|--------|--------|---------|
| Mercury | Venus | Earth | Mars | Jupiter | Saturn | Uranus | Neptune |
| 0 | 0 | 1 | 2 | 67 | 62 | 27 | 14 |

Directions: Use the chart above to complete the following math problems.

- _____ - _____ = _____
 [moons of Jupiter] [moons of Uranus]
- (_____ + _____) × _____ = _____
 [moons of Earth] [moons of Neptune] [moons of Mars]
- _____ × _____ × _____ = _____
 [moons of Jupiter] [moons of Saturn] [moons of Venus]

- If six more moons were discovered around Jupiter and two more were discovered around Saturn, what would be the total number of moons those two planets would have altogether? Show the equation used to find this answer.
-

- Imagine that a pie chart is created to show the number of moons in the Inner Planets vs. the number of moons in the Outer Planets. What would that pie chart look like? Divide the circle on the right into two sections to show this. Label one section "Inner Planets" and the other section "Outer Planets."

