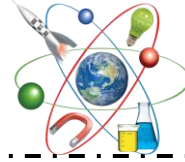


interactive SCIENCE



WORKBOOK

Grade 2



SEMESTER

1

Name: _____

Class: _____

Teacher: _____

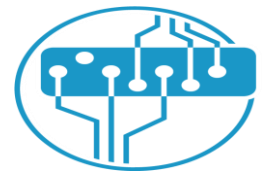
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GRADE 2

Part 1

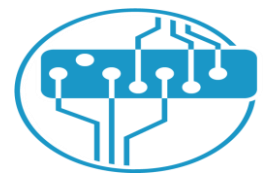
The Nature of Science



Lesson 1	1
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Part 2

The Technology and Tools



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WORKBOOK CHECKLIST



LESSON	PAGE NO.	✓	TEACHER'S SIGNATURE	PARENT'S SIGNATURE
		X		
Skills Handbook Part 1: The Nature of Science				
LESSON 1	<i>pp. 1 – 2</i>			
LESSON 2	<i>pp. 3 – 4</i>			
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Skills Handbook Part 2: Technology and Tools				
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Name: _____ Date: ____ / ____ / ____

Lesson 1: What Questions Do Scientists Ask? (use with pages 174 – 177)



Words to Know: Write the word next to the description it matches.

Scientists

Inquiry

1. _____ are people who study the world around them.
2. _____ means asking questions and looking for answers.



True or False: Write T if the statement is correct and F if not.

- _____ 3. Scientists **use inquiry** to learn.
- _____ 4. Scientists **share** what they learned.
- _____ 5. Scientists ask questions about **plants and animals only**.



Explain: Tell if each statement is true or false. Explain your choice.

6. Scientist only ask questions about space.

This statement is _____ because _____

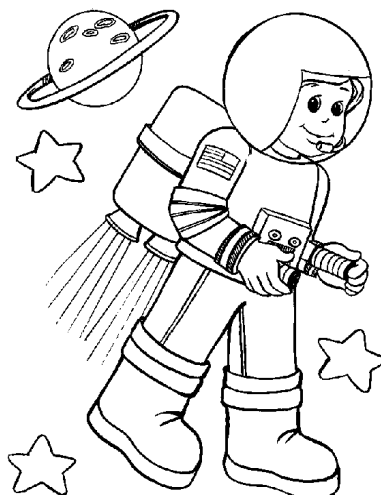
7. Scientist discovered that all plants need soil to grow.

This statement is ----- because -----



Apply Concepts

8. Suppose you were asked to be the first child astronaut. What question would you want to investigate?



Name: _____

Date: ____ / ____ / ____

Lesson 2: What Kinds of Skills Do Scientists Use? (use with pages 178 – 181)



Words to Know: Write the word next to the description it matches.

observe

predict

Classify

1. _____ means to put things in order.

2. You _____ when you tell what you think will happen.

3. You _____ when you use your senses to find out about something.



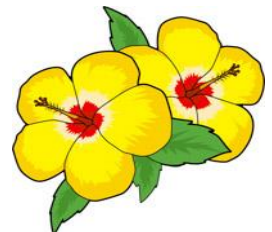
True or False: Write T if the statement is correct and F if not.

- _____ 4. Scientists do experiment **once only**.
- _____ 5. Scientists can predict **without observing**.
- _____ 6. Scientists find out what they know in **many different ways**.

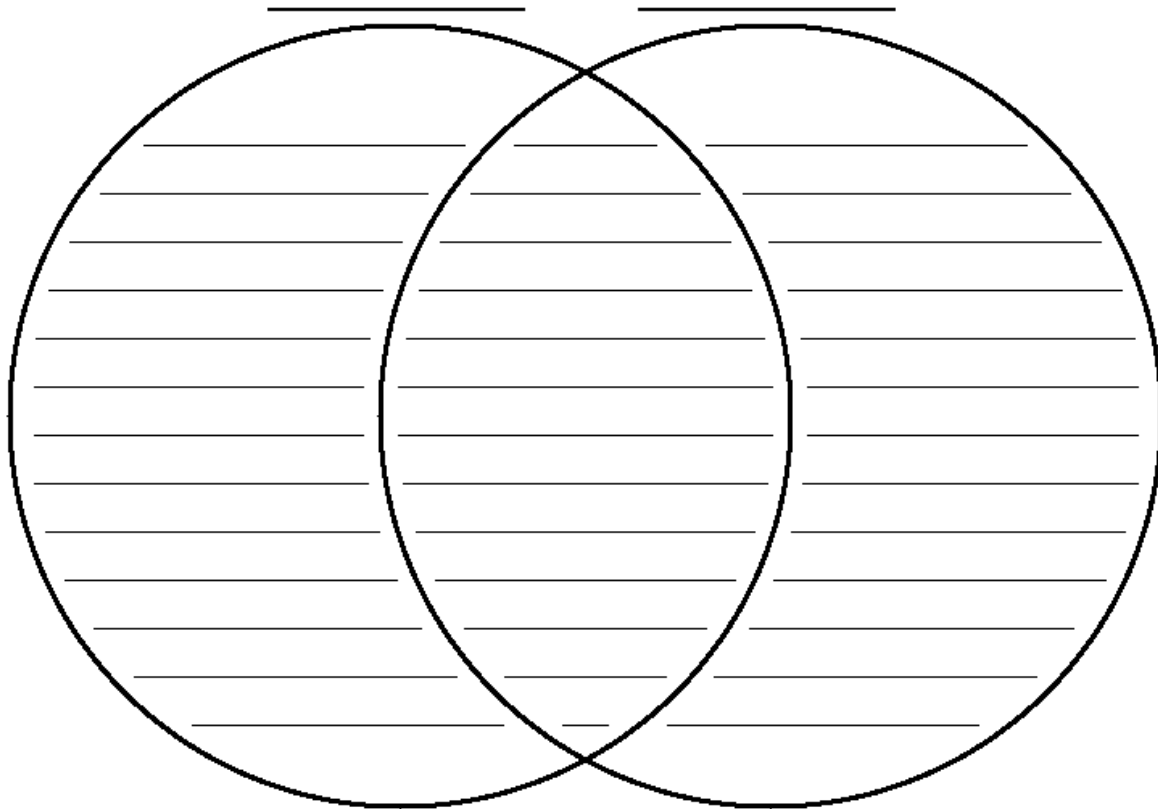
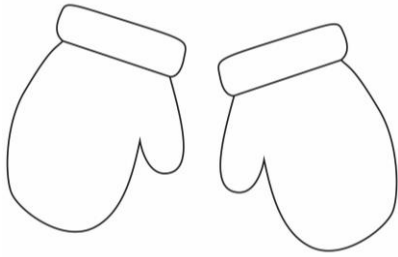


Apply Concepts

7. Suppose that you are a scientist who studies flowers. Name three different ways that you could classify flowers.



8. Compare and Contrast: Use the Venn diagram to tell how the two objects below are alike and how are they different.



Name: _____

Date: ____ / ____ / ____

Lesson 3: How Do Scientists Use Tools and Stay Safe? (use with pages 182 – 187)



Words to Know: Write the word next to the description it matches.

Tool

Measure

1. _____ is something that is used to do work.

2. _____ is to find the size or amount of something.



True or False: Write T if the statement is correct and F if not.

_____ 3. **All tools** help you measure.

_____ 4. A bee scientist **wears** face cover and a body cover.



Apply Concepts

5. Look at the rocks. How could you use tools to observe and learn more about these rocks?





Explain

6. Tell if each statement is true or false. Explain your choice.

You should wear safety goggles at all times. _____

This statement is _____ because _____

7. Scientists take each measurement more than one time.

This statement is ----- because -----



Matching: Draw a line to match the following pictures.

8. Measures mass

9. Measures volume

10. To protect your eyes

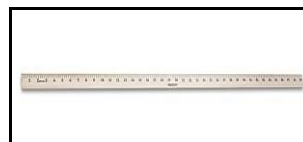
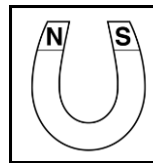
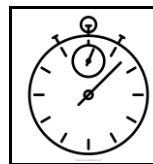
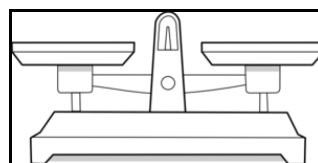
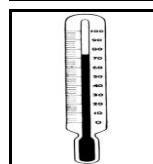
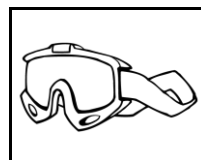
11. Measures temperature

12. Measures length (long objects)

13. Measures length (short objects)

14. Measures how long something takes

15. To check if an object is made up of certain metals.



Name: _____

Date: ____ / ____ / ____

Lesson 4: How Do Scientists Find Answers? (use with pages 188 – 191)



Words to Know: Write the word next to the description it matches.

Conclusion

Hypothesis

Scientific Methods

1. _____ are ways of finding answers.
2. _____ is a possible answer to a question.
3. _____ is what you decide after you think about all you know.



True or False: Write T if the statement is correct and F if not.

- _____ 4. The result of experiment **always supports the hypothesis**.
- _____ 5. Scientists **investigate once** before they draw conclusions.
- _____ 6. **Sometimes**, scientists do scientific method in **different order**.



Explain

7. In Scientific Method, what should you do after you collect and record your data?

8. Why do scientists repeat their investigation?





Apply Concepts

9. A scientist wants investigate how much water a plant needs each day. What should the scientist do to find out?



10. Arrange the following steps in scientific method.
Write numbers 1-6 inside the box.

Do your test

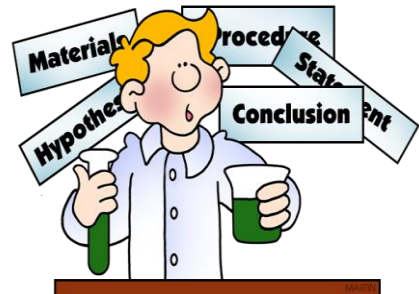
Plan a fair test

Make your Hypothesis

Collect and record your data

Ask a question

Tell your conclusion



Name: _____

Date: ____ / ____ / ____

Lesson 5: How Do Scientists Collect and Share Data? (use with pages 192 – 195)**Words to Know: Write the word next to the description it matches.****Data****Chart****infer****Bar graph**

1. _____ is what you observe.

2. _____ helps you organize data.





3. _____ helps you compare data.

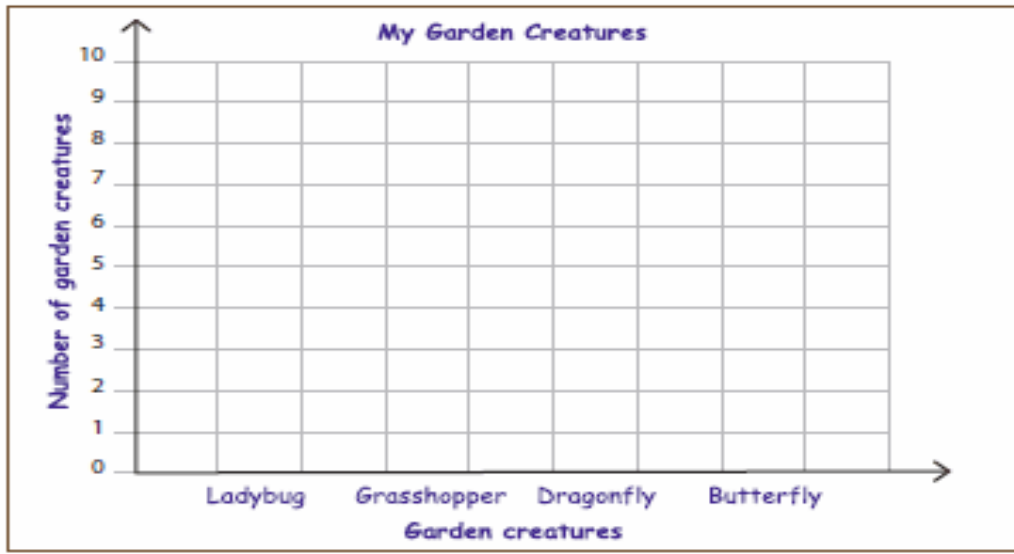
4. You _____ when you use what you know to explain something.

**True or False: Write T if the statement is correct and F if not.**_____ 5. You **use your senses** to collect data._____ 6. Scientists **use charts and graphs** to show data._____ 7. Sometimes, **scientists find patterns** when they record data.**Apply Concepts**8. Suppose that you have an apple in your hand.
What data could you collect about that apple?



9. Graph the given data below, then answer the question.

Ladybug	Grasshopper	Dragonfly	Butterfly
			
7	3	5	9



Draw Conclusions: How many more butterflies are there than grasshoppers?

 Name: _____

Date: ____ / ____ / ____

Lesson 1: What Is Technology? (use with pages 218 – 221)



Words to Know: Write the word next to the description it matches.

Invent

Engineers

Technology

- _____
1. _____ are people who design new things.
- _____
2. _____ is the use of Science to solve problems.
- _____
3. _____ means to make something for the first time.



True or False: Write T if the statement is correct and F if not.

- _____ 4. Cars and trains are **technology**.
- _____ 5. Technology **does not solve** every problem.
- _____ 6. Technology **makes things harder** for people.
- _____ 7. Technology **can help people** to stay healthy.



Explain: Answer the questions below.

8. Is a spoon technology? How do you know?



9. You follow directions to make a paper airplane. Do you invent the paper airplane? Explain why or why not.

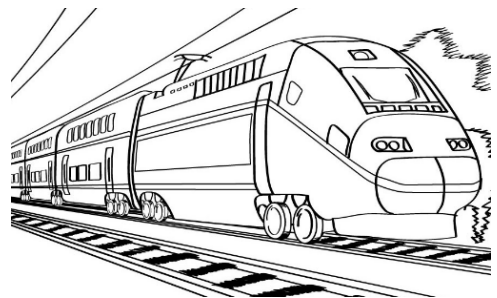
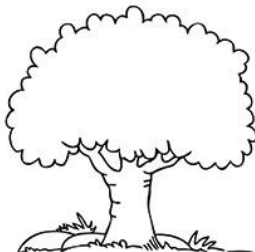
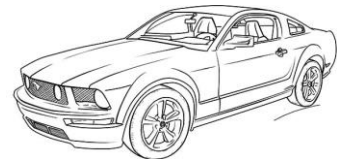


Apply Concepts

10. Give an example of a technology you use everyday. Tell what problem this technology solves.



Circle the objects considered as technology.



Name: _____

Date: ____ / ____ / ____

Lesson 2: How Do People Design New Things? (use with pages 222 – 227)



Words to Know: Write the word next to the description it matches.

Goal

Material

Solution

1. _____ is the answer to a problem.

2. A _____ is what something is made of.

3. _____ is something that you want to do.



True or False: Write T if the statement is correct and F if not.

- _____ 4. Engineers always use design **once only**.
- _____ 5. All materials that engineers choose **are the same**.
- _____ 6. Sometimes, engineers plan and draw **more than once**.
- _____ 7. Engineers **need to set goals** to find a solution to a problem.



Explain: Read the steps of the design process. Number them 1 through 5 to put them in the correct order.

- | | |
|---|---|
| <p>_____</p> <p>_____</p> <p>_____ Make a test</p> <p>_____</p> <p>_____ Find a problem</p> | <p>_____</p> <p>_____ Plan and draw</p> <p>_____</p> <p>_____ Record and share</p> <p>_____</p> <p>_____ Choose materials</p> |
|---|---|

Name: _____

Date: ____ / ____ / ____

Lesson 3: How Do We Use Tools and Machines? (use with pages 228 – 233)



Words to Know: Write the word next to the description it matches.

Machine

Simple machine

1. A _____ is a tool that can make work easier.
2. A _____ is a tool with few or no moving parts.



True or False: Write T if the statement is correct and F if not.

- _____ 3. **Only humans** can use body parts as tools.
- _____ 4. There is **only one type** of tools and machines.
- _____ 5. You **can use some parts of your body** as tools.
- _____ 6. Sometimes, tools and machines **can do things that your body cannot do.**



Explain

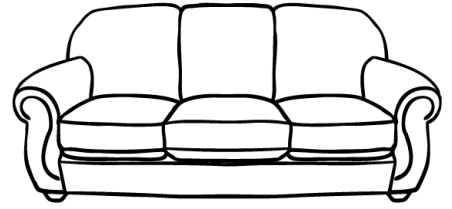
7. What is an inclined plane? How does it help you work?





Apply Concepts

8. A mover needs to move a couch from the first floor to the second floor. It does not fit through the stair well. Which simple machine might help the mover? Why?





Label the simple machines below.

Pulley

Wedge

Inclined plane

Lever

Screw

