UNIT 9

E-1: Science and Technology
F-1: Cultural, Social, Personal Perspectives and Science
G-1: History and Nature of Science
Key Vocabulary

CREATIVITY
- ability to create or invent

CURIOSITY
- desire to know or learn

IMAGINATION
- creativity; resourcefulness
Key Vocabulary

INNOVATION
a new idea, method, or device

KNOWLEDGE
information or skills acquired through experience or education

PERSPECTIVE
a view or outlook
**Key Vocabulary**

**RELATIONSHIP**
- connection or association; the condition of being related

**SCIENCE**
- knowledge about the natural world that is derived from observation and experiments

**SOCIETY**
- a group of organisms of the same species that live and work together in an organized way
**TECHNOLOGY**

an application of science that is used to make products or tools that people can use to solve problems
LESSONS
Science Language for Success

Introduce the key science vocabulary, using concrete materials and/or pictures.

LISTENING
Use the Mini Pictures activity page from the Student Support Materials. Have the students cut out the pictures. Say the key words and the students show the pictures.

Whisper
Mount the vocabulary pictures on the board. Group the students into two teams. Whisper a vocabulary word to the first player in each team. When you say “Go,” the first player in each team must then whisper the same word to the next player in his/her team. The players should continue whispering the vocabulary word in this way until the last player in a team hears the word. When the last player in a team hears the word, he/she must rush to the board and point to the picture for the word. The first player to do this correctly wins the round. Repeat until all players have had an opportunity to identify a vocabulary picture. When a player has identified a vocabulary picture, he/she should rejoin the front of his/her team.

Student Support Materials
Have the students work on the activity pages from the Student Support Materials from this unit. Afterward, review their work.

SPEAKING

Half Match
Before the lesson begins, prepare a photocopy of each of the vocabulary pictures. Cut each of the photocopied pictures in half. Give the picture halves to the students (a student may have more than one picture half). Say one of the vocabulary words. The two students who have the halves of the picture for that word must show their halves and repeat the word orally. Continue in this way until all of the vocabulary words have been reviewed. This activity may be repeated more than once by collecting, mixing, and redistributing the picture halves to the students. This activity may also be adapted for team form. To do this, cut each of the vocabulary pictures in half. Place half of the pictures in one pile and the other halves in another pile (one pile for each team). Say a vocabulary word. When you say “Go,” the first player from each team must rush to his/her pile of picture halves. Each player must find the half of the picture for the vocabulary word you said. The first player to correctly identify the picture half and to repeat the vocabulary word for it wins the round. Repeat until all players have played.

Numbered Boxes
Before the activity begins, prepare a page that contains twenty (or more) boxes. Number each of the boxes. Provide each student with a copy of the numbered boxes. Each student should then shade in half of the boxes with a pencil (any ten
**SPEAKING (CONTINUED)**

boxes). When the students are ready, mount the vocabulary pictures on the board and say the number of a box (between one and twenty) to one of the students. The student should look on his/her form to see if that box number is shaded in. If that box is shaded in, the student may “pass” to another player. However, if the box is not shaded in, he/she should say a complete sentence about a vocabulary picture you point to. The students may exchange pages periodically during this activity. Repeat until many students have responded in this way.

**High Card Draw**

Give each student in the class a card from a deck of playing cards. Mount the vocabulary pictures on the board and number each one. Call two students' names. Those two students should show their cards. The student who has the highest card (aces can be high or low) should then say a complete sentence about a vocabulary picture you point to. The students may exchange playing cards periodically during the activity. Repeat until many students have responded.

**READING**

*Introduce the science sight words to the students—match the sight words with the vocabulary pictures. The sight words are included in the Student Support Materials, attached to these lesson plans.*

**Circle of Words**

Before the activity begins, prepare a page that contains the sight words. Provide each student with a copy of the page. The students should cut the sight words from their pages. When a student has cut out the sight words, he/she should lay them on his/her desk in a circle. Then, each student should place a pen or pencil in the center of the circle of sight word cards. Each student should spin the pen/pencil. Say a sight word. Any student or students whose pens/pencils are pointing to the sight word you said, should call “Bingo.” The student or students should then remove those sight words from their desks. Continue in this way until a student or students have no sight words left on their desks.

**Letter Encode**

Give each student his/her envelope that contains the alphabet letters. Mount one of the science pictures on the board. The students must use the cut-out letters to spell the word. Review the students’ work. Repeat, until all of the words have been spelled in this way.

**Student Support Materials**

Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.
Yarn Spell
Group the students into two teams. Give the first player in each team lengths of yarn or string. Say a vocabulary word. When you say “Go,” the first player in each team must then use the yarn or string to “write” the word on the floor. The first player to complete his/her word wins the round. Repeat this process until all players in each team have played. If pipe cleaners are available, they may be used in place of the yarn or string (have both long and short lengths of the pipe cleaners ready for the activity).

Overhead Configurations
Before the activity begins, write the sight words on an overhead transparency sheet. Place an overhead projector on the floor, facing the board. Lay the overhead transparency sheet on the screen of the projector and turn the projector on. The sight words should be projected onto the board. Then, use chalk to draw configurations around each of the sight words. When a configuration has been drawn for each sight word, turn the overhead projector off. Call upon a student to use chalk to fill in one of the configurations with its sight word. You may wish to have more than one student participating in this process at the same time.

This activity may also be conducted in team form. In this case, when you say “Go,” the first player in each team must rush to the configurations. Each player must attempt to fill in one of the configurations with its correct sight word. The first player to do this correctly wins the round. Repeat until all configurations have been filled in in this way.

Student Support Materials
Have the students work on the activity pages from the Student Support Materials from this unit. Afterward, review their work.
CREATIVITY
CURIOUSITY
IMAGINATION
INNOVATION
KNOWLEDGE
PERSPECTIVE
RELATIONSHIP
SCIENCE
SOCIETY
STUDENT SUPPORT MATERIALS

Listening  ●  Mini Pictures
Listening: Mini Pictures

Have the students cut out the pictures. Say the key math words from this unit, and the students should hold up the pictures for them.
STUDENT SUPPORT MATERIALS

Listening Comprehension
Listening Comprehension

Read the following sentences to the students. The students should circle “true” or “false” for each of the sentences. Review the students’ work.

1. Creativity is the ability to create or invent. True False

2. Curiosity is creativity, resourcefulness. True False

3. Imagination is the desire to know or learn. True False

4. Innovation is an application of science that is used to make products or tools that people can use to solve problems, make life easier, and improve the world. True False

5. Knowledge is information or skills acquired through experience or education. True False

6. Perspective is a view or outlook. True False

7. A relationship is a connection or association, the condition of being related. True False

8. Science is knowledge about the natural world that is derived from observation and experiments. True False

9. Society is a group of organisms of the same species that live and work together in an organized way. True False

10. Technology is a new idea, method, or device. True False
STUDENT SUPPORT MATERIALS

Sight Words
relationship  science  society
technology
**Sight Words Activity Page**

*Have the students highlight or circle the words in this word find. Words appear horizontally.*

<table>
<thead>
<tr>
<th>Creativity</th>
<th>Knowledge</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imagination</td>
<td>Perspective</td>
<td>Society</td>
</tr>
<tr>
<td>Innovation</td>
<td>Relationship</td>
<td>Technology</td>
</tr>
</tbody>
</table>

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G U T E C H N O L O G Y A E N W
X L H P I N N O V AT I O N T P
B R W J W Q R T U O P L J G C P
X E Y L S A C D G J K B M C V E
K L A E C U R I O S I T Y F W R
C A E D I A E Z S O W N Z T X S
L T V B E E A E X C D Y S V S P
S I O X N V T W F I V J E G Q E
Q O B T C O I B H E R K X Y G C
D N R Y E B V U K T G U D D A T
J S T I Z R I Y L Y N I E B E I
I H F L Q T T M M Z T L R H N V
R I H N E F Y P B E W O C U Y E
C P K J I M W L C O H A F N Z I
S C N I M A G I N A T I O N O N
L O C J R R Z K R Q C I F R T U
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**Sight Words Activity Page**

*Have the students highlight or circle the words in this word find. Words appear horizontally.*

<table>
<thead>
<tr>
<th>Creativity</th>
<th>Knowledge</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curiosity</td>
<td>Perspective</td>
<td>Society</td>
</tr>
<tr>
<td>Imagination</td>
<td>Relationship</td>
<td>Technology</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>TECHNOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>INNOVATION</td>
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<td>R</td>
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<td>E</td>
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<tr>
<td>S</td>
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<tr>
<td>C</td>
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<tr>
<td>L</td>
</tr>
<tr>
<td>CURIOUSITY</td>
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<td>R</td>
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<tr>
<td>A</td>
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<td>W</td>
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<tr>
<td>E</td>
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<tr>
<td>P</td>
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<tr>
<td>O</td>
</tr>
<tr>
<td>IMAGINATION</td>
</tr>
<tr>
<td>K</td>
</tr>
</tbody>
</table>
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Sight Words Activity Page

Have the students cut out the key words and glue them at the bottom of their pictures.

creativity  curiosity  imagination  innovation

knowledge  perspective  relationship  science

society  technology
Sight Words Activity Page

Have the students print the key words from this unit horizontally in the boxes (each word may be written more than once). They should then fill in all other boxes with any letters. Have the students exchange pages. The students should then circle the words on the page.
STUDENT SUPPORT MATERIALS

Basic Reading  •  Encoding
Encoding Activity Page

Have the students cut out and encode the syllables of the words, OR number the syllables in their correct sequence.

- ence  sci

- gy  o  tech  nol

- per  tive  spec
Have the students cut out and encode the syllables of the words, OR number the syllables in their correct sequence.

- variation
- curio
- yi
- ci
- et
- so
Word Scramble Activity Page

Rearrange or unscramble the following letters to form one of the listed unit words. As you use a word, cross it off.

<table>
<thead>
<tr>
<th>knowledge</th>
<th>technology</th>
<th>curiosity</th>
<th>science</th>
<th>relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>creativity</td>
<td>innovation</td>
<td>society</td>
<td>imagination</td>
<td>perspective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>s i e c n c</th>
<th>s _ i _ _ _ _</th>
</tr>
</thead>
<tbody>
<tr>
<td>e c y o i s t</td>
<td>_ _ _ e _ y</td>
</tr>
<tr>
<td>t o o y n g e c h l</td>
<td>t e _ _ _ _ _ _ g _</td>
</tr>
<tr>
<td>n v n a i t o n i o</td>
<td>_ _ n _ _ _ _ i o _</td>
</tr>
<tr>
<td>o n p i a r h l s t e i</td>
<td>r _ _ a _ _ _ _ _ _ p</td>
</tr>
<tr>
<td>e e p c v e p s t r i</td>
<td>_ _ e _ _ _ _ c t _ _ _ _</td>
</tr>
<tr>
<td>u r i y s c t i o</td>
<td>_ _ _ _ _ _ _ i t _</td>
</tr>
<tr>
<td>g n t i a i n o m a i</td>
<td>_ _ m _ _ _ _ _ _ n</td>
</tr>
<tr>
<td>w d g e e k o n l</td>
<td>k _ _ _ _ _ _ d _ _</td>
</tr>
<tr>
<td>e w o n e k d l g</td>
<td>_ _ _ s _ _ _ _ t _ _ _ _</td>
</tr>
</tbody>
</table>
STUDENT SUPPORT MATERIALS

Reading Comprehension
### Reading Comprehension Activity Page

Have the students cut out the words and glue them under their definitions.

<table>
<thead>
<tr>
<th>knowledge about the natural world that is derived from observation and experiments</th>
<th>a view or outlook</th>
<th>creativity; resourcefulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>connection or association; the condition of being related</td>
<td>a new idea, method, or device</td>
<td>a group of organisms of the same species that live and work together in an organized way</td>
</tr>
<tr>
<td>desire to know or learn</td>
<td>information or skills acquired through experience or education</td>
<td>an application of science that is used to make products or tools that people can use to solve problems</td>
</tr>
<tr>
<td>the process of a liquid changing into a vapor or gas</td>
<td>ability to create or invent</td>
<td></td>
</tr>
</tbody>
</table>

**Keywords:**
- creativity
- curiosity
- imagination
- innovation
- knowledge
- perspective
- relationship
- science
- society
- technology
STUDENT SUPPORT MATERIALS

Basic Writing
Basic Writing Activity Page

Have the students write the word for each picture.
Have the students write in the missing letters.

crea____________ity

curio____________y

ima____________ation

in____________ation

know____________e

perspec____________e

rela____________hip

sci____________e

s____________iety

tech____________ogy
Graphic Organizer

Model the process for students using the following unit words.

<table>
<thead>
<tr>
<th>WHAT IT IS</th>
<th>WHAT IT IS NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>creativity</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHAT IT IS</th>
<th>WHAT IT IS NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>curiosity</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHAT IT IS</th>
<th>WHAT IT IS NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>imagination</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHAT IT IS</th>
<th>WHAT IT IS NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>innovation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHAT IT IS</th>
<th>WHAT IT IS NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>knowledge</td>
<td></td>
</tr>
</tbody>
</table>
### Graphic Organizer

<table>
<thead>
<tr>
<th>WHAT IT IS:</th>
<th>WHAT IT IS NOT:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective</td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
</tr>
<tr>
<td>Society</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td></td>
</tr>
</tbody>
</table>
STUDENT SUPPORT MATERIALS

Creative Writing
Creative Writing Activity Page

Have the students write sentences of their own, using the key words from this unit. When the students’ sentences are finished, have them take turns reading their sentences orally. The students should say “Blank” for the key words; the other students must name the “missing” words. You may wish to have the students write the “definitions” for the key words.

**CREATIVITY**


**CURIOSITY**


**IMAGINATION**


**INNOVATION**


**KNOWLEDGE**


**PERSPECTIVE**


**RELATIONSHIP**


**SCIENCE**


**SOCIETY**


**TECHNOLOGY**


On the lines below, write a paragraph based on the picture above. Before you begin writing, think about the indigenous people of the Pacific Northwest and their use of natural resources. Reflect on their creative use of design and detail in their woven spruce root baskets.
UNIT ASSESSMENT

E-1: Science and Technology
F-1: Cultural, Social, Personal Perspectives and Science
G-1: History and Nature of Science
SCIENCE PROGRAM

Unit Assessment Teacher’s Notes
Grade 7  •  Unit 9 (E–1, F-1, G-1)

Theme: Science and Technology
Cultural, Social, Personal Perspectives and Science
History and Nature of Science Concepts of Earth Scienc

Date:________________
Unit Assessment

Provide each student with a copy of the students’ pages. Read the following instructions aloud. The students should answer the questions on their copies of the assessment.

BASIC LISTENING

Turn to pages 1 in your test. Look at the pictures in the boxes.

1. Write the number 1 on top of the picture for CREATIVITY.
2. Write the number 2 on top of the picture for CURIOSITY.
3. Write the number 3 on top of the picture for IMAGINATION.
4. Write the number 4 on top of the picture for INNOVATION.
5. Write the number 5 on top of the picture for KNOWLEDGE.
6. Write the number 6 on top of the picture for PERSPECTIVE.
7. Write the number 7 on top of the picture for RELATIONSHIP.
8. Write the number 8 on top of the picture for SCIENCE.
9. Write the number 7 on top of the picture for SOCIETY.
10. Write the number 8 on top of the picture for TECHNOLOGY.

LISTENING COMPREHENSION

Turn to page 2 in your test. Listen to the sentences I say. Circle “T” for true and “F” for false sentences.

1. Creativity is the ability to create or invent.
2. Curiosity is creativity, resourcefulness.
3. Imagination is the desire to know or learn.
4. Innovation is an application of science that is used to make products or tools that people can use to solve problems, make life easier, and improve the world.
5. Knowledge is information or skills acquired through experience or education.
6. Perspective is a view or outlook.
7. A relationship is a connection or association, the condition of being related.
8. Science is knowledge about the natural world that is derived from observation and experiments.

9. Society is a group of organisms of the same species that live and work together in an organized way.

10. Technology is a new idea, method, or device.

**SIGHT RECOGNITION**
Turn to pages 3 and 4 in your test. Look at the pictures in the boxes. Circle the word for each picture.

**DECODING/ENCODING**
Turn to page 5 in your test. Look at the scrambled letters on the left. Rearrange or unscramble the letters to form each of the unit words.

**BASIC WRITING**
Turn to page 6 in your test. Look at the pictures in the boxes. Write the word for each picture.

**CREATIVE WRITING**
Turn to page 7 in your test. Write a sentence of your own, using each word.
Teacher: To get a percentage for this student’s assessment, divide the total number of questions correct by the total number of questions, then multiply this answer by 100 to determine the percentage of questions answered correctly.
SCIENCE PROGRAM

Unit Assessment Student Pages
Grade 7  •  Unit 9 (E–1, F-1, G-1)

Theme: Science and Technology
Cultural, Social, Personal Perspectives and Science
History and Nature of Science Concepts of Earth Science

Date:___________      Student’s Name:____________________

Number Correct:__________       Percent Correct:__________
1. T  F
2. T  F
3. T  F
4. T  F
5. T  F
6. T  F
7. T  F
8. T  F
9. T  F
10. T  F
CREATIVITY

CURIOSITY

IMAGINATION

INNOVATION

KNOWLEDGE

PERSPECTIVE

RELATIONSHIP

SCIENCE

SOCIETY

TECHNOLOGY