Diagnostic Assessment for Inventions and Inventors

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Assessment Title: Diagnostic Assessment: Inventions and Inventors
Assessment Form: Diagnostic
Type of Assessment: (Performance Assessment, Constructed Response, and Selected Response)

Duration: 30 minutes

Standard(s) Assessed: SS.A.1.2.3.3.1, SS.A.3.2.1.3.1, SS.A.3.2.1.3.2, LA.A.2.2.5.3.1, LA.A.2.2.8.3.1, LA.B.2.2.3.3.1, and SC.H.3.2.3.3.1

Description of Assessment Activity: This diagnostic assessment is used to determine student prior knowledge of the selected Sunshine State Standards for the unit. The diagnostic assessment incorporates performance, constructed, and selected responses. Once the diagnostic is administered and assessed, the teacher uses the results to tailor and guide instruction throughout the unit.

NOTE: The purpose of the diagnostic assessment is for the teacher to find out what the students already know. Since this material should be new to the students, they probably will not know many of the answers. Do not allow them to become frustrated or spend excessive time on this assessment.

Teacher Directions:
1. Briefly introduce the students to the unit "Inventions and Inventors." Keep the introduction simple to avoid relating new information prior to the administration of the diagnostic assessment.
2. Prepare the students for the assessment by explaining that the Diagnostic Assessment will show how much they already know about the standards covered in the unit and you will use this information to guide your teaching.
3. Explain to the students that this is a "low stakes" assessment in an effort to prevent undue stress on the students.
4. Distribute the assessment.
5. Instruct students to listen as you read and explain the directions.
6. Ask if there are any questions.
7. Tell students they may begin. This should take approximately 30 minutes for the students to complete.
8. Ask students to turn in their diagnostic assessments when finished.

Following the Assessment:
9. Diagnostically assess students' performances on the assessment using the provided answer key. Identify any sections on which the majority of students demonstrated mastery. If any sections have been mastered, review the unit plan's course of instruction and omit any unnecessary instruction.
10. The next class period, hand out the diagnostic assessments and allow for student reflection. Collect the assessments and keep until unit completion.

At Completion of the Unit:
11. Return the diagnostic assessments to the students at the completion of the unit after Summative 3 has been administered, scored, and recorded for grade assignment purposes. As students compare the Diagnostic Assessment and Summative 3, they will notice their growth in knowledge of the skills addressed throughout the course of the unit.
Student Directions:
1. Listen as I provide a brief introduction of the unit "Inventions and Inventors."
2. Do your best on this assessment, but don't worry if you do not know all the answers. The information gathered from your performance will be used to guide the instruction of the unit.
3. Listen as I read and explain the directions for the assessment.
4. Are there any questions?
5. Complete the Diagnostic. Do the best you can.
6. When you are finished, turn in your diagnostic assessment to the designated area or as instructed by me.
5. The next day: Take a look at your performance on the Diagnostic. Don't be alarmed if there are items on the assessment that you did not know. You will learn more about them during the course of our new unit.
At the completion of the unit:
7. Compare your performance on the Diagnostic Assessment with your performance on Summative 3. Can you see growth in learning? Did your performance improve?

Scoring Method and Criteria:
The Diagnostic Key is used to score the assessment.

This is a diagnostic assessment. The teacher will determine the appropriate course of instruction for the unit based on student responses. Score the Diagnostic Assessments for accuracy using the Diagnostic Key that is provided.
Look at the timeline below. Then answer the questions.

1. Which was invented first, the compact disc or the telephone?

2. Was the television invented **before** or **after** the magnetic tape recorder?

3. When was the compact disc invented?
Write the letter of the invention on the line beside the inventor.  SS.A.3.2.1.3.1

<table>
<thead>
<tr>
<th>Inventor</th>
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<tr>
<td>4. Jonas Salk ______</td>
<td>A. Light Bulb</td>
</tr>
<tr>
<td>5. Alexander Graham Bell _____</td>
<td>B. Telephone</td>
</tr>
<tr>
<td>6. Thomas Edison ______</td>
<td>C. Polio vaccine</td>
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7. Tell one way the invention of the polio vaccine has helped or hindered human health.  SC.H.3.2.3.3.1

_____________________________________________________________________

_____________________________________________________________________

8. Tell one way the invention of the telephone has impacted (changed) your life.  SS.A.3.2.1.3.2, SC.H.3.2.3.3.1

_____________________________________________________________________

_____________________________________________________________________
9. Circle the reference materials you could use to gather information about inventors and inventions:
   (LA.A.2.2.8.3.1)

   - maps
   - photos
   - charts
   - encyclopedias

   - timelines
   - books
   - websites
   - graphic organizers

10. Pretend you’ve invented a new toy. You want to invite your friends over to see it. Write an invitation to your friends below. LA.A.2.2.3.3.1
Diagnostic Key

1. telephone
2. before
3. 1965
4. C
5. B
6. A
7. Accept all reasonable answers. Possible answers might include:
   • The polio vaccine decreased the number of people who had polio.
   • The polio vaccine helped people not get polio.
   • The polio vaccine helped others to see that through scientific research health solutions for diseases such as polio were possible.
8. Accept all reasonable answers. Possible answers might include:
   • The telephone made it easier to communicate with others.
   • The telephone made it faster to communicate with others.
   • The telephone makes emergency care faster and more successful.
9. All answers should be circled.
10. Invitations should include when, where, purpose, and who is hosting the event.