Simple Machine Scavenger Hunt

Overview: Students will practice identifying types of simple machines in an activity that is fun and engaging.

Procedure: After initial instruction on the types of simple machines, the teacher will provide students with scavenger hunt worksheet. The worksheet should include the 6 categories of simple machines as headings with enough space below each heading for the student to document their findings. Each student will have a clipboard, worksheet, and pencil to take on the scavenger hunt. Students will be instructed to remain in a silent line while on the scavenger hunt because it is an individualized activity. The teacher will then walk with the students through the school while the students document everyday items as simple machines. The teacher should remind students that the goal is to correctly classify the most items. In addition, it may helpful to provide a few initial examples while in the classroom (example: scissors can be written under the "wedge" category). Upon completion of the scavenger hunt, the class should share answers as a group.

ASOL Covered in this Activity:

3S-FME 3b: The student will investigate and understand simple machines and their uses. Key concepts include types of simple machines.

Extension Ideas:

- The teacher may add a complex machines category to challenge students.
- Explore the playground and take pictures of simple machines and how others are playing on the equipment. Sort the pictures into categories.

3S-FME 3d: The student will investigate simple machines and their uses. Key concepts include examples of simple and compound machines found in the school, home, and work environments.

Extension Ideas:

- The teacher can add complex machines as a category.
- The teacher can assign the scavenger hunt as homework to be completed with items found within the student's home.
- Students can take pictures of simple machines and sort them into the correct category.

5S-SI 1b: The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

- b) objects or events are classified and arranged according to characteristics or properties.
- I) models are constructed to clarify explanations, demonstrate relationships, and solve needs.

Extension Ideas:

- The teacher can add complex machines as a category.
- The teacher can assign the scavenger hunt as homework to be completed with items found within the student's home.
- Explore the playground and take pictures of simple machines and how others are playing on the equipment. Sort the pictures into categories.
- Create a simple machines center in the classroom to allow for exploration of simple machines. Provide materials for students to plan and create their own simple machine.

 Create a class project book or slide show with student created simple machines and descriptions of how they work and their function

Materials Needed:

- 1. Scavenger Hunt Worksheet
- 2. Clipboards
- 3. Pencils

Instructional Setting:

Classroom, cafeteria, school hallways, playground

Community Connections and/or Peer Interaction:

- -During the activity, students will navigate through their school building while remaining silent and completing a task. In addition, the group discussion upon the completion of the activity will allow students to communicate their findings with their teacher and classmates.
- -Community based trip to the local hardware store (Lowes/Home Depot) to find examples of simple machines and why someone would need to buy them.
- -Use typically developing peers to help build simple machines.
- -Allow other staff and students the opportunity to view student created projects during a class open house.
- -Invite a carpenter, construction worker or other similar occupation to visit the classroom with examples of simple machines they use for their job.

Functional Activity/Routine:

- -This type of scavenger hunt activity can be used when presenting information on any type of curriculum that involves multiple characteristics.
- -Include a sharing during morning meeting of a simple machine you saw on your way to school and how it was being used. Add information to a voice output device or create a picture choice board to allow for individual student communication needs.

Strategies to Collect Evidence:

- -The teacher should collect the students' worksheets and grade to reflect amount of items correctly classified.
- -Data sheet with student responses to selecting pictures of simple machines being used to sort or identify for the scavenger hunt template.

Specific Options for Differentiating this Activity:

Some students may not be able to write their observations. It would be beneficial to partner these students with a paraprofessional that could act as a scribe for the student. Some students may need to communicate through a communication device. In addition, if the activity seems too overwhelming, it would be beneficial to provide a student with a field of pictures of items in the school that they could classify on their worksheet.