

<b>Content:</b> Science/Art	<b>Grade/Course:</b> 3rd	<b>Timeline:</b> May 2-6, 2016
<b>Standard(s):</b> 3.1.1 Generate a question that can be answered by science and develop a hypothesis based on observations. 3.1.3 Demonstrate the ability to work cooperatively while respecting the ideas of others and communicating one's own conclusions about findings.		
<b>Lesson Overview:</b> There are 6 simple machines. They make work easier. Each one has its parts and functions.		<b>Lesson Objective(s):</b> I can... <ul style="list-style-type: none"> <li>Describe the 6 simple machines</li> <li>Identify the parts of each simple machine</li> <li>Discuss the uses of each simple machine</li> </ul>
<b>Vocabulary:</b> Lever – Fulcrum, Effort (Force), Resistance (Load) Wheel, Axle Pulley – Simple, Compound Wedge Inclined Plane Screw		<b>Focus Question(s):</b> <ul style="list-style-type: none"> <li>What are the 3 classes of lever?</li> <li>What are the 2 kinds of pulley?</li> <li>How does wheel and axle work?</li> <li>What are the uses of a screw?</li> <li>Does the height of the inclined plane affect work done?</li> <li>What are the uses of a wedge?</li> </ul>

**Description of Lesson (Including Instructional Strategies):**

**Anticipatory Set:** Story, PowerPoint, Pictures

**Instruction and Strategies:**

April 25: Show a PP of the 6 simple machines (PPT slide 2-23). Discuss the inclined plane using the video (PPT slide 24): [https://www.youtube.com/watch?v=E\\_ErIQjN0s](https://www.youtube.com/watch?v=E_ErIQjN0s)

April 26: Show a flag pole. Discuss how the flag is raised by the simple machine called pulley. Show a video (PPT slide 25): <https://www.youtube.com/watch?v=aMx7nI1H9ik>

April 27: Distribute toy cars to each group. Have them examine how the wheels work when they roll the toy car. Let them present their analyses. Show a video of wheel and axle (PPT slide 26). Discuss the examples presented in the video. <https://www.youtube.com/watch?v=P7xu900miEc>

April 28: Have the children bring out their pencil or pen. Let them look at the point that is used for writing. Have them draw the enlarge point. Show similar examples like door stopper, knife. Direct children's attention to the edge of the stopper and blade of the knife. Show commonality among the 3 examples. Introduce the wedge. Show a video and discuss.

<https://www.youtube.com/watch?v=LAawZird80k>

April 29: Give a triangle shape paper. Let them roll it onto a pencil. Show a picture of a screw. How are their work and the screw on the picture similar? Show the video on screw.

<http://mocomi.com/screw>

**Guided Practice:** Completing worksheets

**Formative Assessment:**

Oral questions, group work participation, drawings

**Closure:**

Children draw examples of the 6 simple machines.

**Independent Practice:** Worksheet, graphic organizers, notebook assignments, drawings, posters

**Accommodations/Modifications:**

Group work to help one another, use of bigger pictures, one-to-one

**Resources (Textbook and Supplemental):**

Pictures and videos from the Internet, Harcourt Science Book, Harcourt Science Workbook, PPT

**Reflection:**

<b>Content:</b> Science/Art	<b>Grade/Course:</b> 3rd	<b>Timeline:</b> March 14 – 18, 2016
<b>Standard(s):</b> 3.5.2 Describe how discarded products contribute to the problem of waste disposal on earth 3.1.1 Generate a question that can be answered by science and develop a hypothesis based on observations		
<b>Lesson Overview:</b> Pollution problems affecting the earth Waste Disposal	<b>Lesson Objective(s):</b> I can... <ul style="list-style-type: none"> <li>• Define what pollution is</li> <li>• Describe the effects of improper waste disposal on air quality</li> <li>• Identify waste products that contribute to air pollution</li> </ul>	
<b>Vocabulary:</b> Pollution Air pollution Waste products Waste disposal	<b>Focus Question(s):</b> <ul style="list-style-type: none"> <li>• What is pollution?</li> <li>• What are the waste products that pollute the earth?</li> <li>• How is air affected by improper disposal of waste products?</li> </ul>	

**Description of Lesson (Including Instructional Strategies):**

**Anticipatory Set:** Picture of a Pile of Garbage

**Instruction and Strategies:**

March 14: Show the picture of earth with a pile of garbage. Discuss the discarded products in the garbage. Have them separate the wastes into three 3 groups. Discuss their grouping.

March 15: Discuss the ways to dispose of the garbage. Discuss the effects of each garbage disposal mode.

March 16: Show the video (the part on air pollution only). Have them identify the things that pollute the air and their effects.

### What is Pollution & its Types and Prevention (EVS Lesson for Kids)



March 18: Show a picture of a burnt pile of garbage. Ask: What are the effects of burning discarded products on the environment? Have them state some hypotheses. Then have them perform an experiment on the effects of air pollution. Discuss the results of the experiment.

March 19: Discuss the harmful effects of burning on health and the environment. Show a video. Have them complete a worksheet based on the video.

**Guided Practice:** Completing activity and worksheets

**Formative Assessment:**

Oral questions and worksheet assessment

**Closure:**

Children in groups will summarize the lessons by writing a report on air pollution and its harmful effects.

**Independent Practice:** Worksheet, graphic organizers, notebook assignments, drawings, posters

**Accommodations/Modifications:**

Group work to help one another, use of bigger pictures, one-to-one

**Resources (Textbook and Supplemental):**

Pictures and videos from the Internet, Harcourt Science Book, Harcourt Science Workbook, PPT

**Reflection:**

## Rubric for Worksheet and Participation Assessments

### Rubric for Student Participation

Assessment	Very Good	Good	Fair	Needs Improvement
Worksheet	All the students (100%) got the data right.	Most of the students (80%) got the data right.	Some students (60%) got the data right.	A few (40% or less) got the data right.
Group Work	Everybody in the group was on task	Most members of the group were doing the activity	Some members of the group were actively engaged in the activity	Majority of the members were not paying attention.

<b>Content:</b> Science/Art	<b>Grade/Course:</b> 3rd	<b>Timeline:</b> April 4 – 8, 2016
<b>Standard(s):</b> 3.1.1 Generate a question that can be answered by science and develop a hypothesis based on observations 3.1.3 Demonstrate the ability to work cooperatively while respecting the ideas of others and communicating one's own conclusions about findings.		
<b>Lesson Overview:</b> Force can change the shape of matter. There are different forces that can be applied on matter	<b>Lesson Objective(s):</b> I can... <ul style="list-style-type: none"> <li>• Describe the changes that occur in matter as a result of force applied</li> <li>• Define force</li> <li>• Differentiate between push and pull</li> </ul>	
<b>Vocabulary:</b> Force Push Pull	<b>Focus Question(s):</b> <ul style="list-style-type: none"> <li>• What happens to matter when force is applied on it?</li> <li>• What is force?</li> <li>• What are the two types of forces?</li> <li>• What is the difference between push and pull?</li> </ul>	

**Description of Lesson (Including Instructional Strategies):**

**Anticipatory Set:** Story, PowerPoint, Pictures, dreidel, marbles, toy car, straws, balloons

**Instruction and Strategies:**

April 4: Show a story on PPT slide 2. Discuss what actions were done in the story. Have them classify the actions into "Force Away from You" and "Force Towards You. Introduce push and pull and have them give examples of push and pull.

April 5: Show the picture of the boy on PPT slide 3. Ask what he is doing. Give them the procedure of the activity and have them perform it (Straw Rocket). Discuss the results. Ask what kind of force was involved in the activity.

April 6: Show a moving toy car and ask: Block it with your hand. What happens? Show a rolling marble and block it with your hand. What happens? Discuss the results of the two activities. Ask: What did you apply when you blocked the moving objects? What can force do? Have them draw examples of what force can do. Ask students to perform Marble Roll Experiment (See PPT).

April 7: Show the video (3<sup>rd</sup> slide PPT). Discuss what forces were involved. Have them relate the activity with a medicine dropper used to suck in liquid medicine. Ask students to write similarities and the forces involved.

April 8: Show video (4<sup>th</sup> slide PPT). Review concepts and administer test. If time permits, have student play with dreidel to experience rotational force.

**Guided Practice:** Completing worksheets, experiment

**Formative Assessment:** Oral questions and group work participation

**Closure:**

Children sing a song on push and pull.

**Independent Practice:** Worksheet, graphic organizers, notebook assignments, drawings, posters

**Accommodations/Modifications:**

Group work to help one another, use of bigger pictures, one-to-one

**Resources (Textbook and Supplemental):**

Pictures and videos from the Internet, Motion and Matter Foss Science Resources, Harcourt Science Book, Harcourt Science Workbook, PPT

**Reflection:**

Rubric for Student Participation

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Scientist Name: \_\_\_\_\_

1. When an object is at rest, how it will begin to move?

\_\_\_\_\_

2. What are the two kinds of force called?

\_\_\_\_\_

3. What is it called when a force makes an object move closer?

\_\_\_\_\_

4. What is it called when a force makes an object away?

\_\_\_\_\_

5. How does an object's size make a difference in push or pull?

\_\_\_\_\_

\_\_\_\_\_

<b>Content:</b> Science/Art/Music	<b>Grade/Course:</b> 3rd	<b>Timeline:</b> April 18 – 22, 2016
<b>Standard(s):</b> 3.1.1 Generate a question that can be answered by science and develop a hypothesis based on observations 3.1.3 Demonstrate the ability to work cooperatively while respecting the ideas of others and communicating one's own conclusions about findings.		
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**Description of Lesson (Including Instructional Strategies):**

**Anticipatory Set:** Story, PowerPoint, Pictures

**Instruction and Strategies:**

April 18: Show a picture of a see-saw with a boy on one end. Ask: What should the boy do to make the see-saw work? Introduce the parts of the see-saw. Which part represents the boy? When another boy came in what did he represent? The middle of the see-saw is the fulcrum. Introduce the first class lever. Discuss examples.

April 19: Review the first class lever. Give them a hanger and an object to be put at one end and ask: What do we need to balance the object attached to one end of the hanger? Give them a bigger object and ask where they need to put the bigger object to set up a balance? Have them identify the fulcrum, load and force. Have them make a mobile using hanger and different cut-outs. Make sure the position of the cut-outs in the hanger will maintain a balance

April 20: Show a picture of a wheel barrow. Ask: Where is the load? Where is the fulcrum? Where is the force applied? Show other examples and have them identify the parts of the lever in those examples.

April 21: Show a broom. Ask a student to demonstrate how to sweep a paper on the floor. Where is the force applied? Where is the load? Show other examples and have them identify the parts of the lever in those examples.

April 22: Show a video of simple machines – the lever. Discuss the content. Then give the exam on levers.  
<https://www.youtube.com/watch?v=P7xu9O0miEc>

**Guided Practice:** Completing worksheets.



**Formative Assessment:**

Oral questions and group work participation

**Closure:**

Children sing a song on levers

**Independent Practice:** Worksheet, graphic organizers, notebook assignments, drawings, posters

**Accommodations/Modifications:**

Group work to help one another, use of bigger pictures, one-to-one

**Resources (Textbook and Supplemental):**

Pictures and videos from the Internet, Harcourt Science Book, Harcourt Science Workbook, PPT

**Reflection:**

<b>Content:</b> Science/Art	<b>Grade/Course:</b> 3rd	<b>Timeline:</b> April 25 – 29, 2016
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**Guided Practice:** Completing worksheets

**Formative Assessment:**

Oral questions, group work participation, drawings

**Closure:**

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**Independent Practice:** Worksheet, graphic organizers, notebook assignments, drawings, posters

**Accommodations/Modifications:**

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**Reflection:**