

Do the Science

Instructional materials (text; kit) Toys, Diagram Sheet

Grade Level 6

Lesson: Toy Systems

<p>Big Idea: Any system could be part of a larger system or could have its own system. 6-8 SysA</p>	
<p>Learning Target: I can define and give an example of a system using the language of inputs, outputs, systems, and diagram.</p>	<p>Common Misconceptions: A system must be doing something in order to be a system. A system that loses part of itself is still the same system. The properties of wholes are like the properties of their parts</p>
<p>Success Criteria:</p> <ul style="list-style-type: none"> I can diagram and label a system. My diagram is Accurate, Big, Colorful, and Detailed. I can use the words diagram, input, output, and system to define and give an example of a system. Inputs \longrightarrow Parts \longrightarrow Outputs 	<p>Vocabulary: System Input Output Diagram</p>
<p>Elicitation Activity*: ~10 min. Free exploration.</p>	<p>Talk structures/Discourse techniques: Whole class./Student to student discourse. Whole class./ Teacher to class discourse. Small group work/Student to student discourse Individual work/Student to student discourse Small group work/Group to group discourse Whole class/Student to class</p>
<p>Topic introduction/lesson Activities: ~ 5 min. Model student procedure for jigsaw. ~30 min. Jig saw</p> <ul style="list-style-type: none"> Each group studies a toy system and becomes an expert on that system Students individually draw and label a diagram of the system Expert groups teach each other about their toy system Class discussion 	

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Embedded Formative Assessment/s:

Diagram

Labels on diagram

Student reports

Use of language in written form and verbal: input, output, system, diagram

Adjustment Trigger *What level of student performance will necessitate an instructional adjustment?*

Diagram does not meet each of the following criteria: accurate, big, colorful, and detailed

Vocabulary is used incorrectly or is not used either in writing or verbally.

Instructional Adjustment (if needed):

During activity: Redirect student/s to learning target.

Work with the special case one-on-one at another time.

Lesson Closure*:

~10 Minutes: Basket pull: share one thing you learned.

~ 4 Minutes: Brain Pop video about systems

* Opportunity for formative assessment