

Show what you know about Machines (Pre or Formative Assessment Example)

WHAT DO YOU KNOW ABOUT...

- LEVERS?
- PULLEYS?
- INCLINED PLANES?
- WHEELS AND AXLES?
- WEDGES
- GEARS?
- MECHANICAL ADVANTAGE?
- THE WAYS MACHINES ARE USED IN HOMES, SPORTS, CONSTRUCTION OR HEALTH?



You may choose how you share your knowledge. You can use one or more of the following options:

1. **Use WRITING:** Using the *writing record* sheet provided, use sentences to provide definitions, examples and anything else that you know!
2. **Use LABELED DIAGRAMS:** Using the *labelled diagram record* sheet provided, draw diagrams with detailed labels that effectively show your knowledge about machines.
3. **DISCUSS your knowledge:** You can choose to *schedule a time to talk* with me to share all that you know about machines. You should prepare for our discussion (and may want to use the labelled diagram or writing sheet to prepare) so that you know exactly what you would like to talk about. I will only ask a few guiding questions that will help you to stay on track.

	Expert	Practitioner	Apprentice	Novice
Explain <ul style="list-style-type: none"> • what you know about each machine • its mechanical advantage • how it works in a real world setting 	You are able to demonstrate understanding of how simple machines can work together as complex machines in real world applications. Understanding of mechanical advantage is evident throughout each description. Vocabulary such as <i>friction, fulcrum, motion and resistance</i> may be used appropriately to demonstrate understanding	You are able to confidently define, explain and identify each simple machine. You are able to explain, in detail, how each machine provides assistance to humans in the real world.	You are able to define or explain some of the simple machines we have studied with some clarity. With some support, you are able to show some understanding of how these machines help humans in the real world.	You are unable to define or explain a simple machine or how it is used. This term is new to you and this is an area that requires revisiting.