

HOME LEARNING ROUTE



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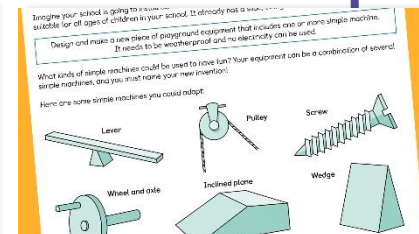
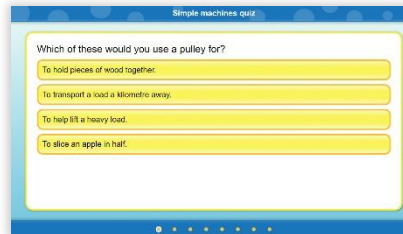
Playground design

Key Stage 2 • Science

Learn about simple machines and their uses, then design a piece of playground equipment that uses at least one simple machine.

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Preview of pupil steps:

1. You're going to design some playground equipment! It will be based on a simple machine. Let's find out what that means.
2. Watch this video to find out about what simple machines are. How many can you spot? Why are simple machines important? Can you see any around you?
3. Read this factfile on simple machines. What examples can you think of for each type? Remember, some will be big, some small and they can be made from different materials.
4. Put your knowledge of simple machines to the test with this quick quiz!
5. Do you understand all the words relating to simple machines? Check your understanding of wheel and axle, pulley, screw, spring, wedge, inclined plane, lever and gears. What do they look like?
6. Design time! Using your knowledge of simple machines, design some fun apparatus for your playground. Will your equipment use more than one type of simple machine? What forces will be at play? Build your model to see how it would work in real life.
7. Finally, watch this video on forces. Which ones can you see in your model? Is there anything you want to add or change about your model?

What are home learning routes? Help children learn from home with these ready-made routes through Discovery Education Espresso content. The routes include video, text and glossaries for learning, as well as art, design and creative writing challenges for children to apply and demonstrate what they know.