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Fun with Forces

Science

Week 7: Fun with Forces

What happens when we change a force?

Vocabulary

push

pull

force

launch

weak

strong

strength

predict

hand span



These rocks are called Karlu Karlu or the Devils Marbles. They were formed millions of years ago.

- 1 With your class, talk about what forces you think could move them.



Forces can be weak or strong. How far you can push something depends on how much force you use.



2 Look at the pictures then talk about which force would be most successful in moving the rock.



Investigation

3

You are going to investigate what happens when we change the strength of a force.

Equipment needed:

- 1 toy car
- 1 car launcher

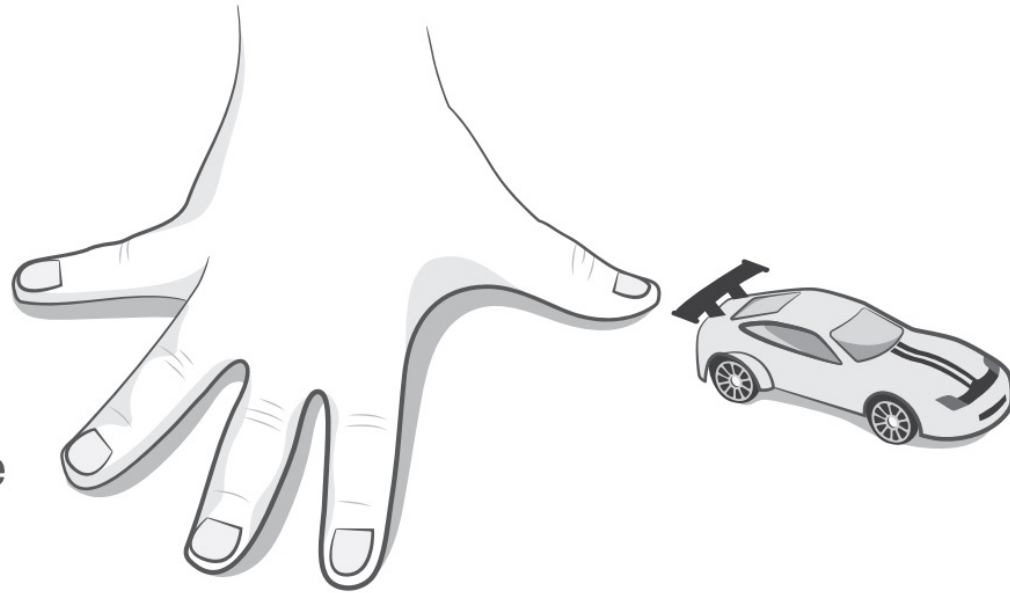


Aim: To find out what happens to a toy car when a force is made stronger.

Predict: When the force is made stronger, I think the car will

Observe:

1. Put your car in the toy car launcher.
2. Pull it back to level 1.
3. Let the car go.
4. Use hand spans to measure how far it went.
5. Record your results.
6. Repeat steps 2–5 for level 2 and 3.



Force	Distance travelled	
Level 1	Number of hand spans	
Level 2	Number of hand spans	
Level 3	Number of hand spans	

Explain:



What did you see?



What do you think?



What do you wonder?

Was your prediction correct?

4

Repeat the investigation with another car. One that is much bigger or smaller than the first one you used.

Predict: When I use a car that is _____ I think the force will make it go _____.

Observe and record:



Force	Distance travelled	
Level 1	Number of hand spans	
Level 2	Number of hand spans	
Level 3	Number of hand spans	

Explain:

What was different about the two cars? _____