

What are forces?

Worksheet

Science - Forces

Miss Hummel



Note-taking task:

Write down the definition of a force and write the three things it can do to an object.



Answer this question:

What were the four examples of contact forces?



Answer this question:

What are two examples of non-contact forces?



Match the words

Air resistance

Gravitational force

Friction

Magnetic force

Upthrust

- pushes objects upwards on objects that are in water.
- pulls everything downwards towards the earth.
- acts when something tries to move quickly through air.
- acts between two surfaces that are sliding, or trying to slide, across each other.
- makes magnetic objects attract or repel each other.



Answers

Air resistance

Gravitational force

Friction

Magnetic force

Upthrust

- pushes objects upwards on objects that are in water.

- pulls everything downwards towards the earth.

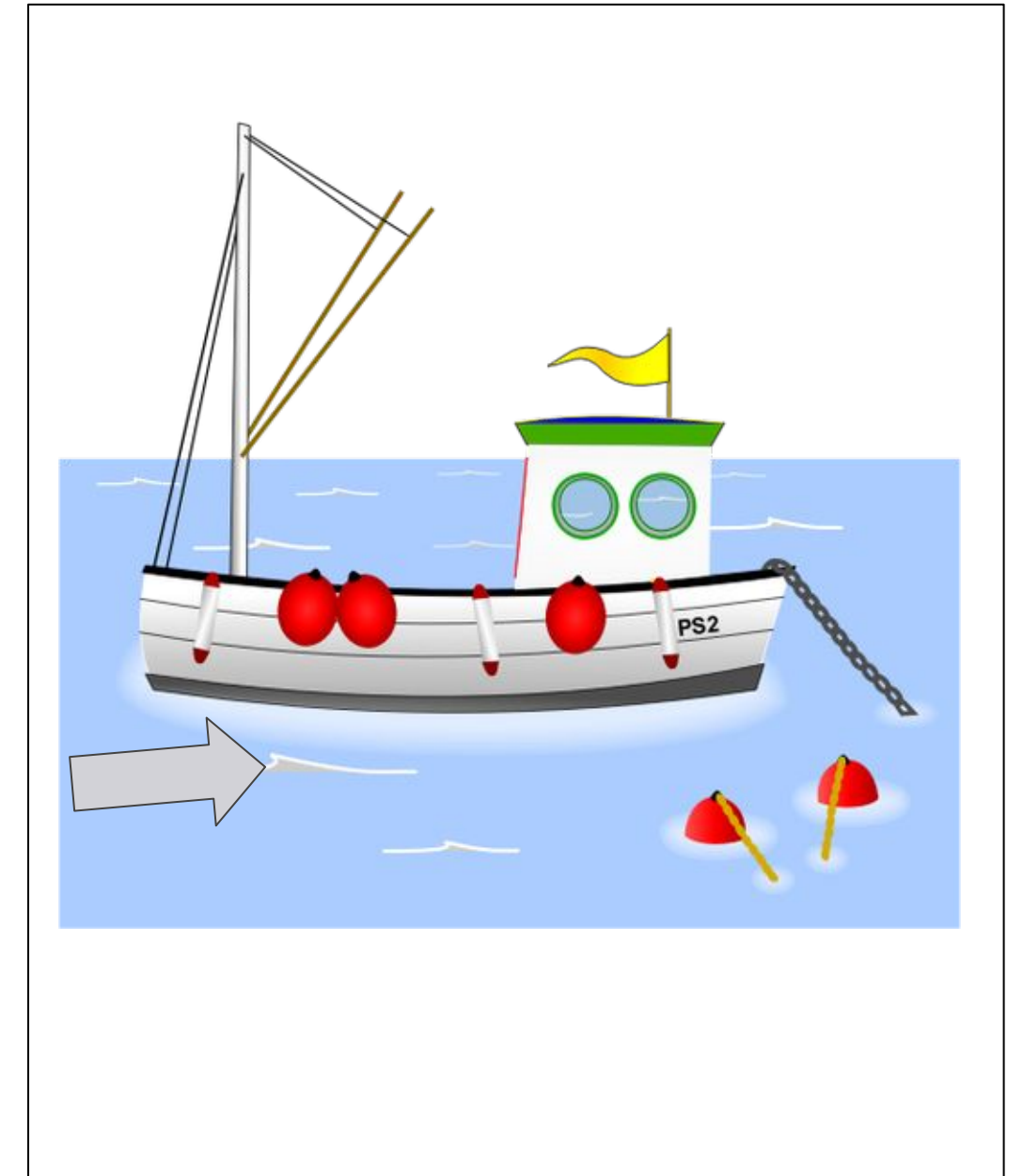
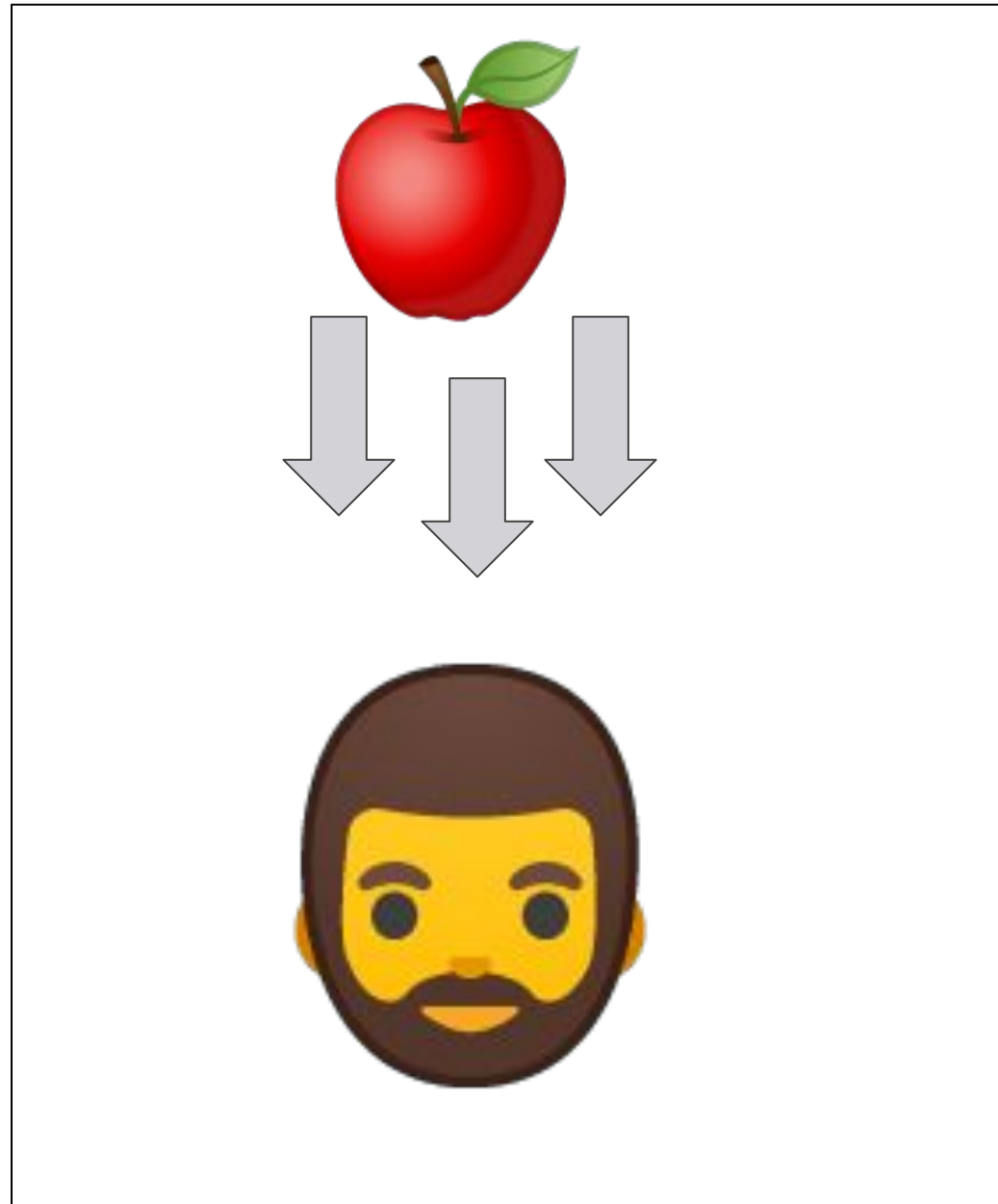
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- acts between two surfaces that are sliding, or trying to slide, across each other.

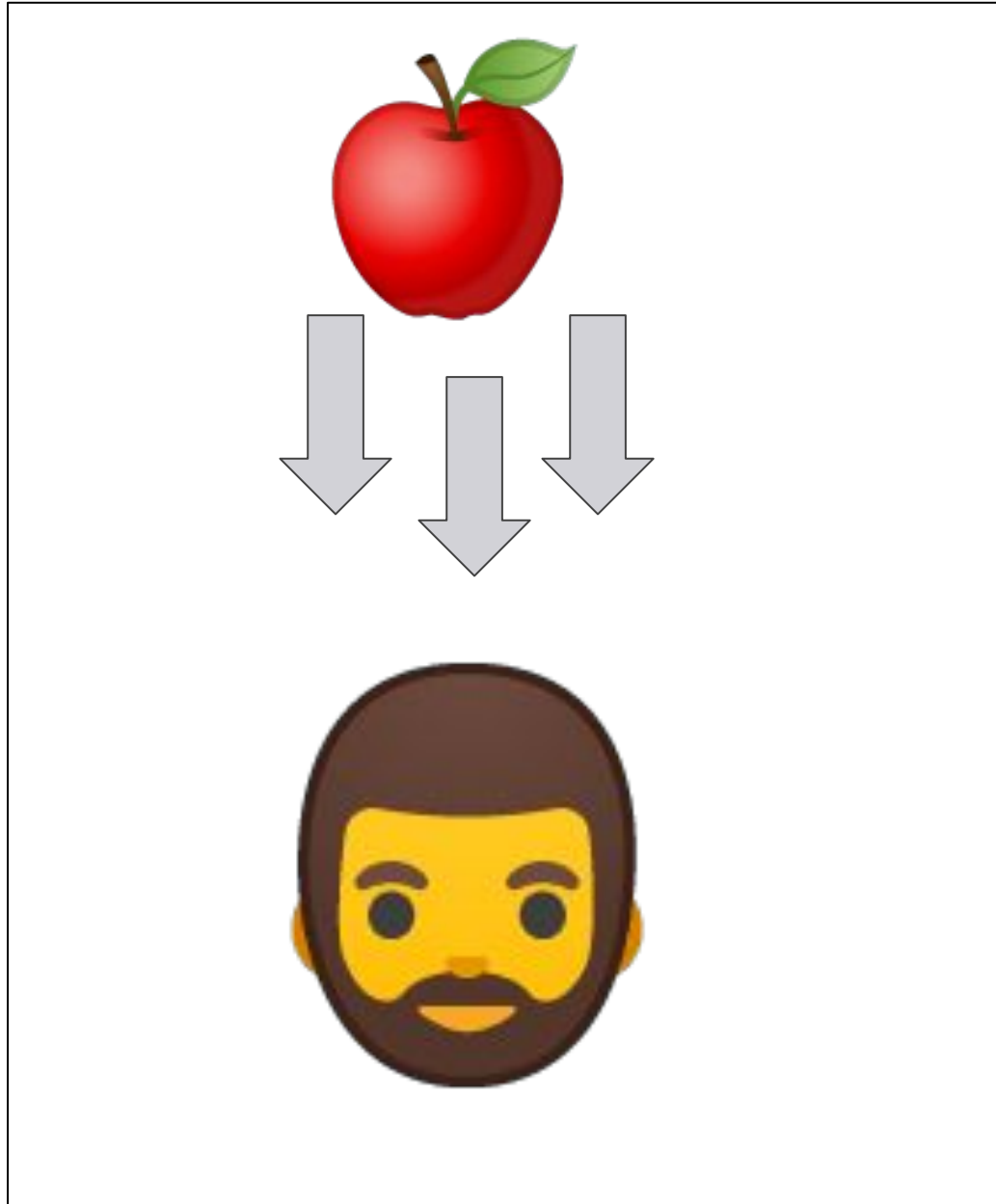
- makes magnetic objects attract or repel each other.



Which force is shown in each of the diagrams below:



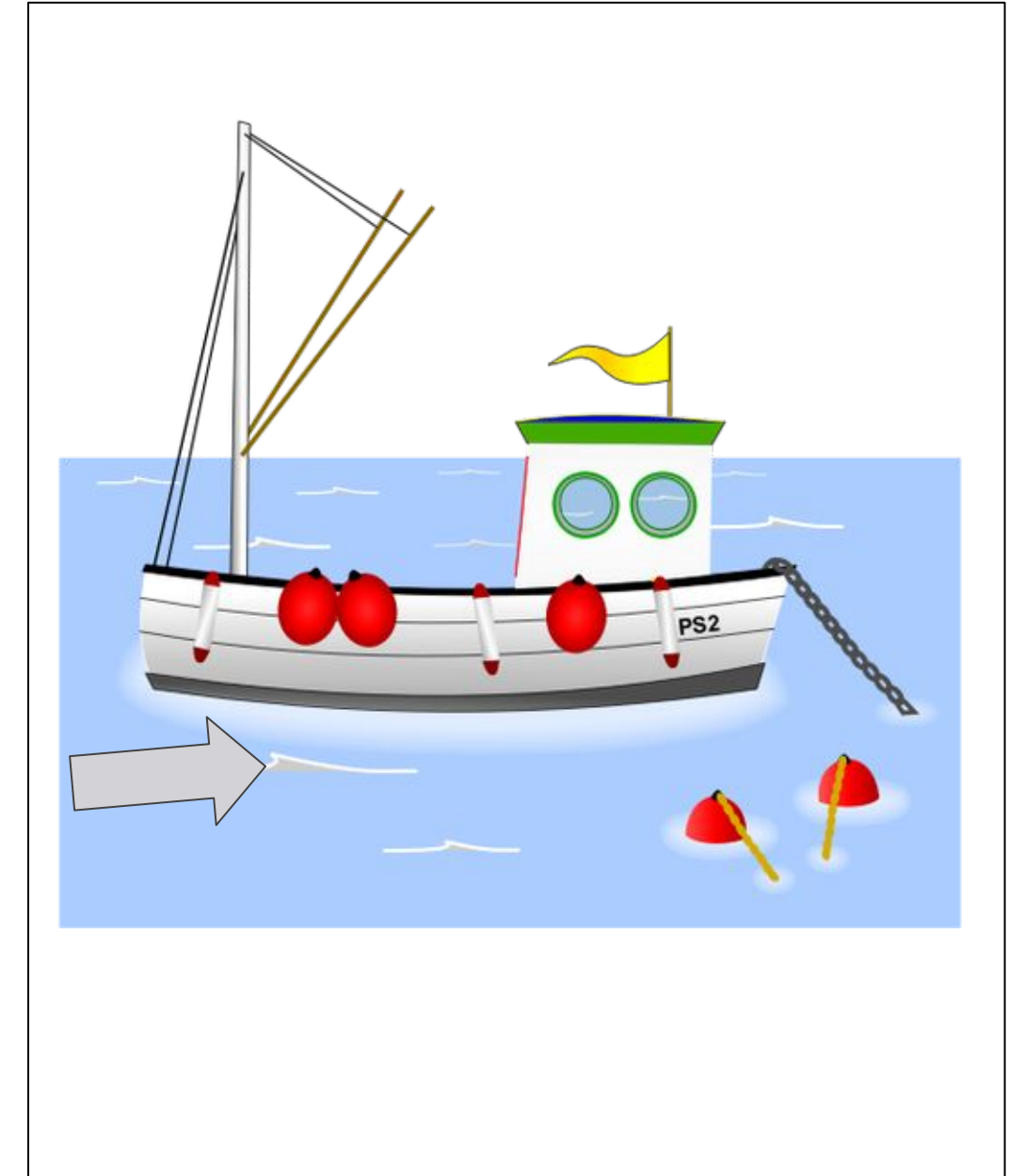
Answers:



Gravitational force



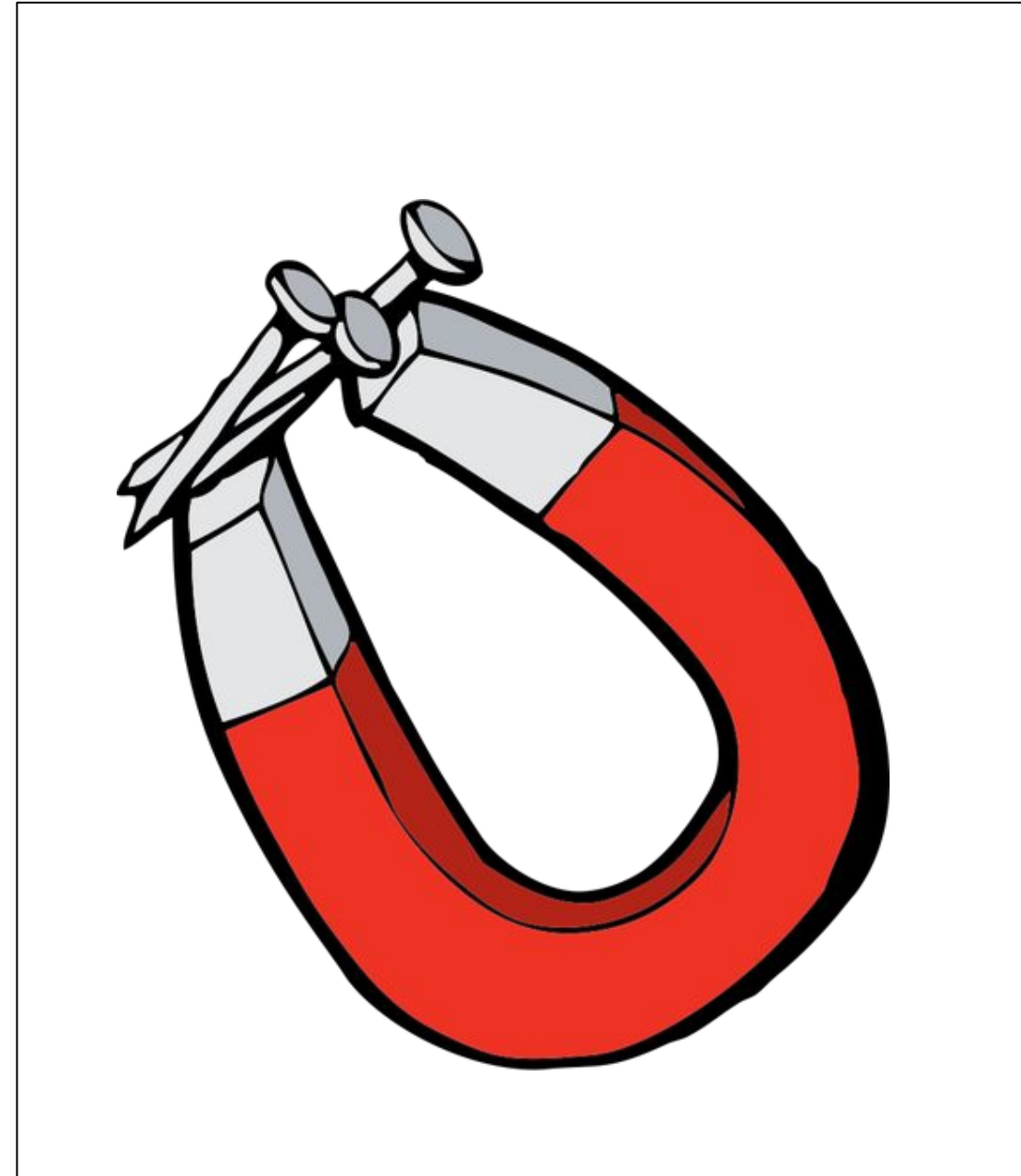
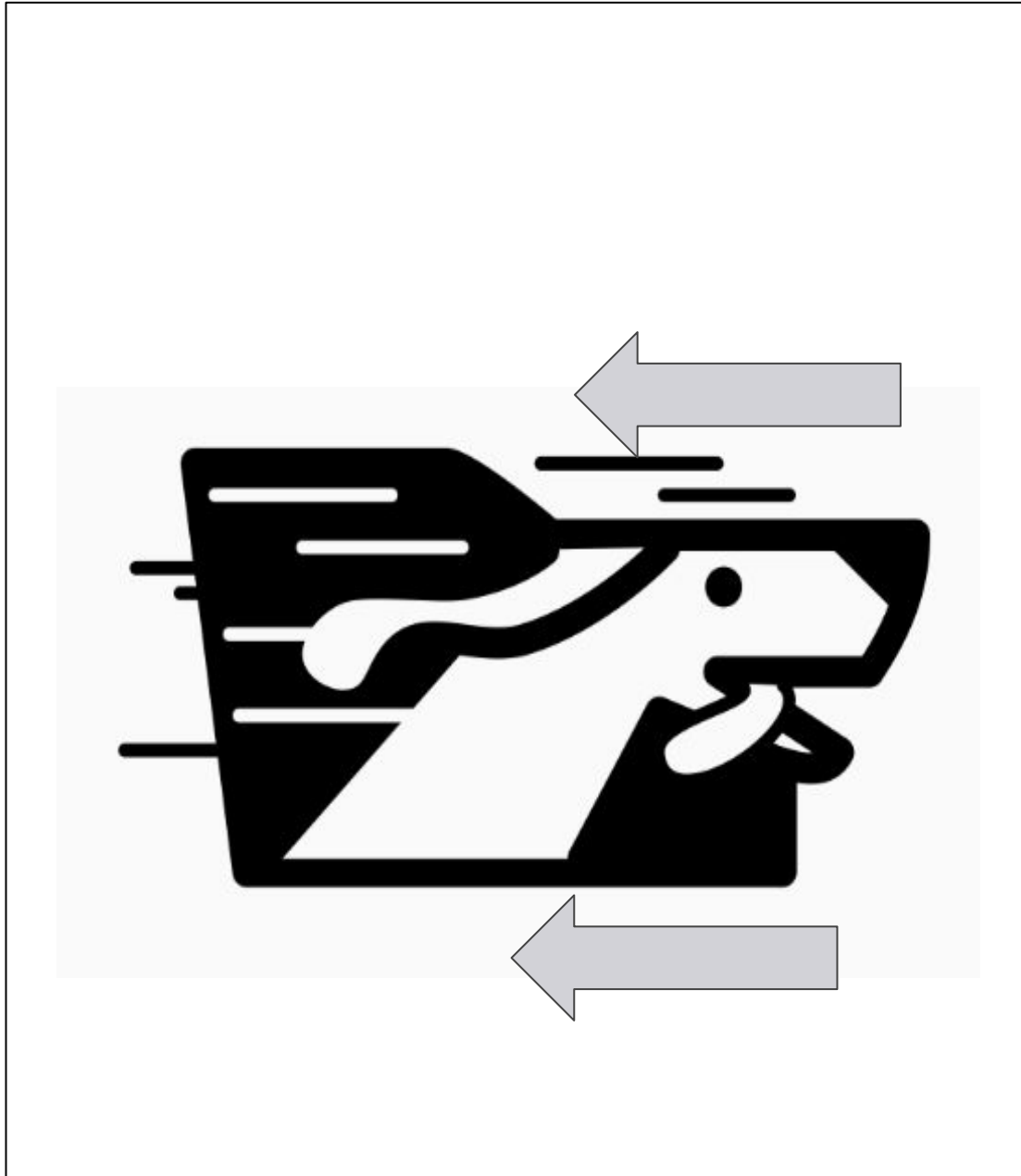
Friction



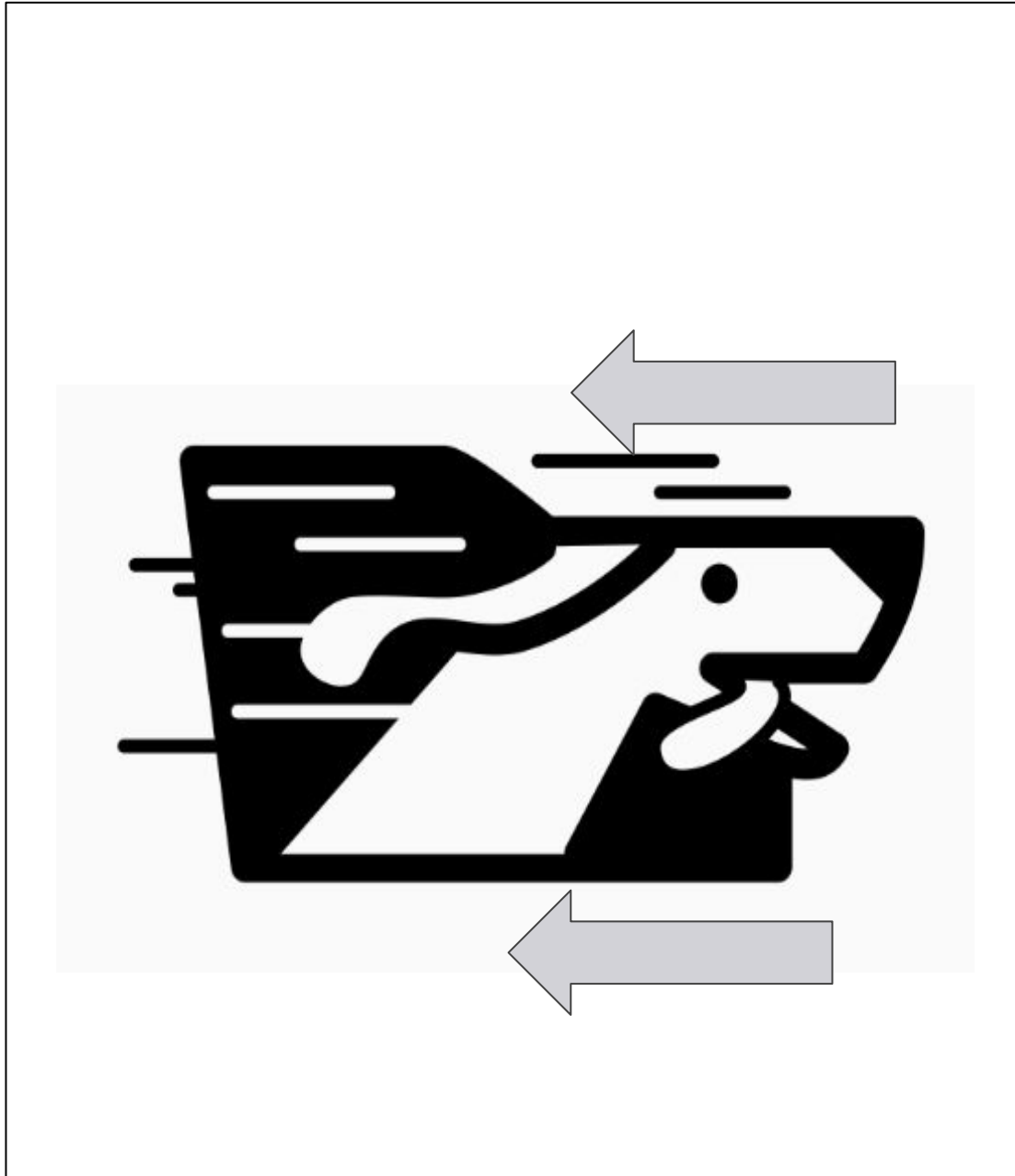
Water resistance



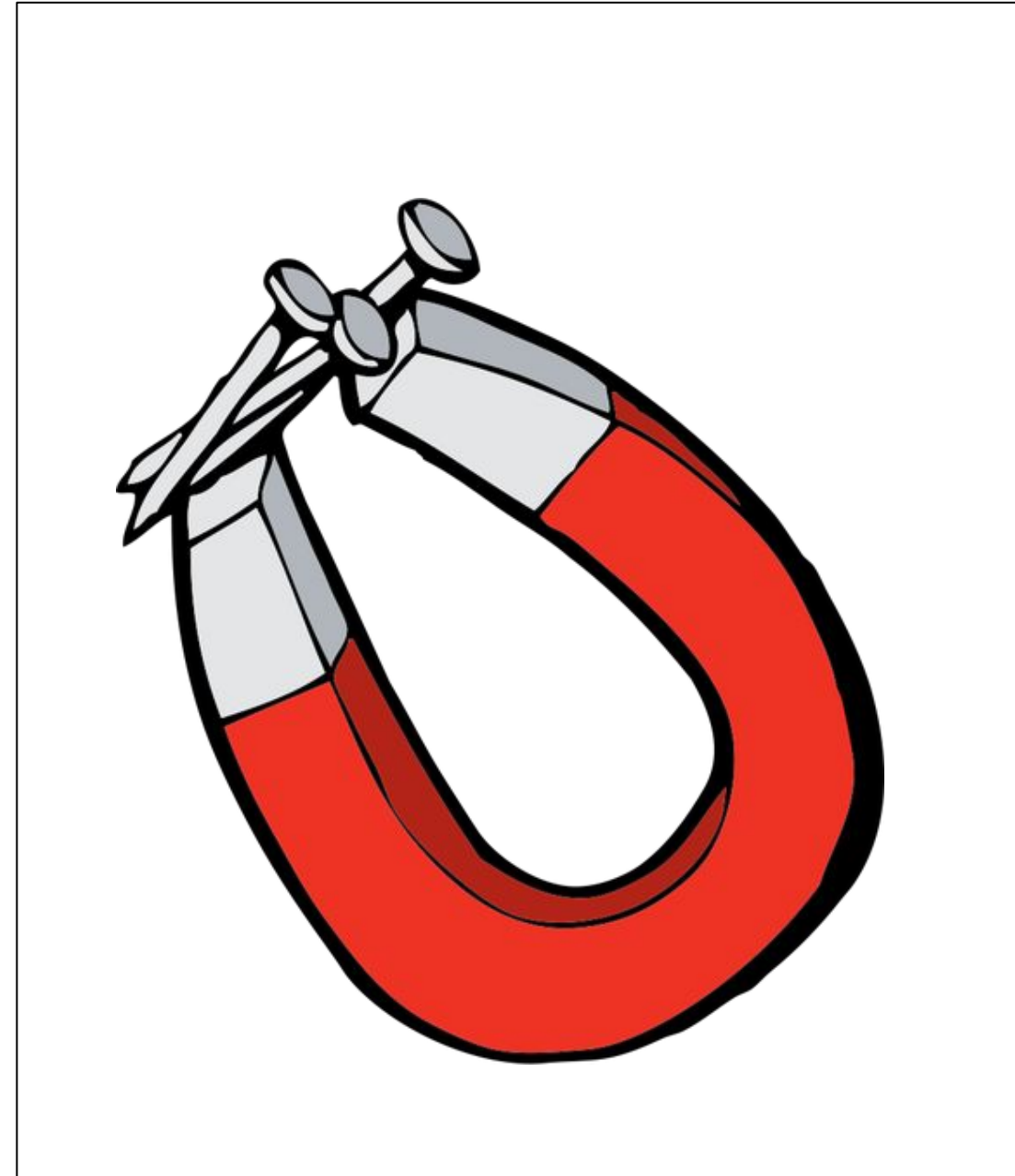
Which force is shown in each of the diagrams below:



Answers:



Air resistance



Magnetic force



Write down which force you think is acting in each case

What has happened	Which force?	Why do think it was that force?
Jenna fell over and scraped the skin on her knee. Which force acted on her skin?	<i>“Friction has acted”</i>	<i>“Because the force was caused by the floor and her knee rubbing against each other”</i>
When Julia’s ball fell into a pond she noticed it did not sink. Which force pushes upwards from the water?		
Maryam placed a new fridge magnet onto the side of the fridge and it stayed stuck to the side. Which force keeps it sticking to the fridge?		
Thomas has toy soldiers and he noticed that the one with a parachute falls slowly to the ground when he drops them from the top of the stairs when the others fall quickly. Which force slows it down?		



Answers:

What has happened	Which force?	Why do think it was that force?
Jenna fell over and scraped the skin on her knee. Which force acted on her skin?	<i>“Friction has acted”</i>	<i>“Because the force was caused by the floor and her knee rubbing against each other”</i>
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Thomas has toy soldiers and he noticed that the one with a parachute falls slowly to the ground when he drops them from the top of the stairs when the others fall quickly. Which force slows it down?	Air resistance	



Answer this question:

What are all the forces acting on a boat when it is moving forward in water?

