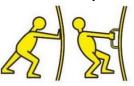




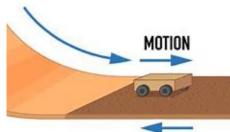
All forces are pushes or pulls.



PUSH PULL

There are many types of magnets.





FRICTION

Friction acts upon moving things.

## <u>Middlethorpe Primary Year 3</u> <u>Spring Term 2: Forces - Friction and Magnets</u>

## Key Questions we will investigate

Which has more friction, a skater or a runner?

When do we need less friction?

When do we need more friction?





**Increasing Friction** 

Football shoes have studs



Wiping wet ball



Kabaddi player wiping hands with sand



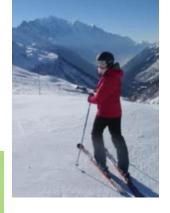
Sole of Shoe is grooved

Why do runners need friction?



Different surfaces create different amounts of friction.

The amount of friction depends on the roughness or smoothness of the surface and the object. More friction will be on rough surfaces and less friction on smooth surfaces.



Do skiers need friction?

Vocabulary Dozen	
attract	To pull towards. Opposite of repel.
pull	A force used to pull an object towards another.
repel	To push away. Opposite of attract.
push	A force used to push an object away.
pole	Ends of a magnet. One is North and the other is South.
magnet	Object that pulls or pushes things with an invisible force called magnetism.
force	The push or pull on an object
compass	An instrument to help follow directions using a magnetic needle that always points North.
magnetic	The force of attraction and repelling caused by a magnet.
friction	The rubbing of one object against

another.

gravity

surface

A force that causes things to

The outside edge of an object.

drop to the ground.