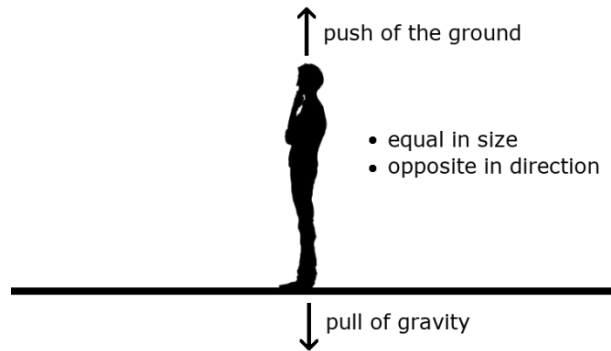


Balanced Forces

Imagine a game of tug-o-war. Two teams are fighting hard, but neither team is able to pull the other team forward. In this example, there are two forces of the same strength acting in opposite directions. As a result, neither team moves. This is an example of balanced forces.

Another example of balanced forces occurring is when we stand still. Look at the forces shown in the following diagram:



Gravity is pulling down on the person, causing the person's feet to push down. The ground is pushing up against the person's feet. The force of the gravity is equal in strength and opposite in direction to the force of the ground. The result is that the person is still.

Any time there is a balanced force, the object does not move.

Imagine if the force of gravity was stronger than the force of the ground. The person would be pulled into the ground by the stronger force of gravity.

What about if the force of the ground was stronger than gravity? What do you think would happen?

Find the Words!

E	O	F	P	U	L	L	S	G	G	O	U
R	P	O	U	B	C	C	M	Q	R	Q	S
S	P	R	S	Q	Z	W	F	A	A	B	F
X	O	C	H	I	U	E	R	A	V	A	B
Z	S	E	G	T	H	Q	I	H	I	L	V
O	I	H	M	P	B	Z	C	O	T	A	G
I	T	N	A	M	U	W	T	L	Y	N	Z
Y	E	S	G	D	D	X	I	Q	Z	C	Q
B	S	O	N	E	U	U	O	U	H	E	Y
K	Q	R	E	H	K	F	N	O	T	D	O
O	O	U	T	E	R	U	A	Q	B	P	C
G	G	M	S	L	F	G	O	R	W	B	I

balanced force pull push
gravity opposites magnets friction

Draw and label another example of a balanced force.

