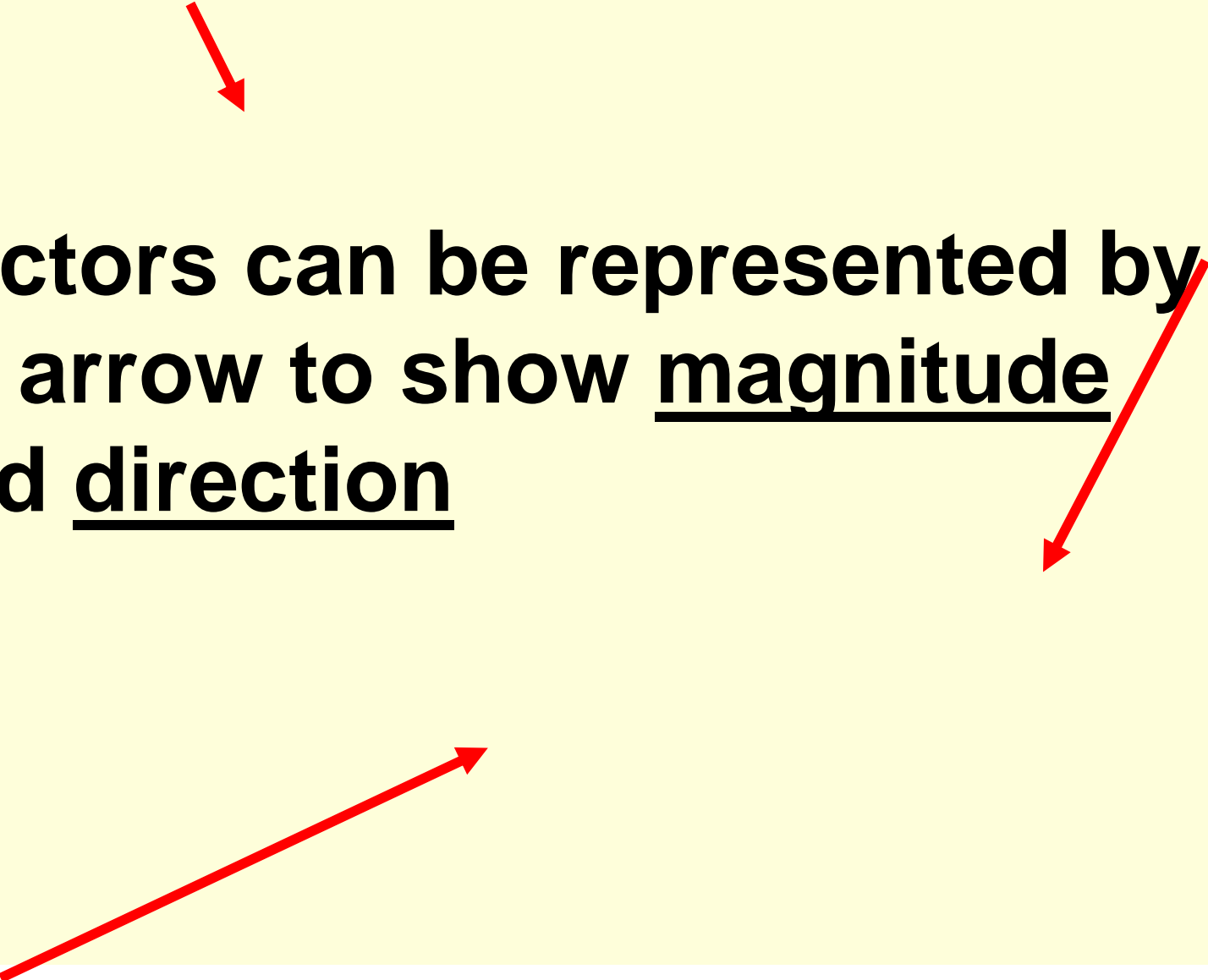


Direction of acceleration due
to gravity vectors

● *

Acceleration due to gravity is a vector quantity.

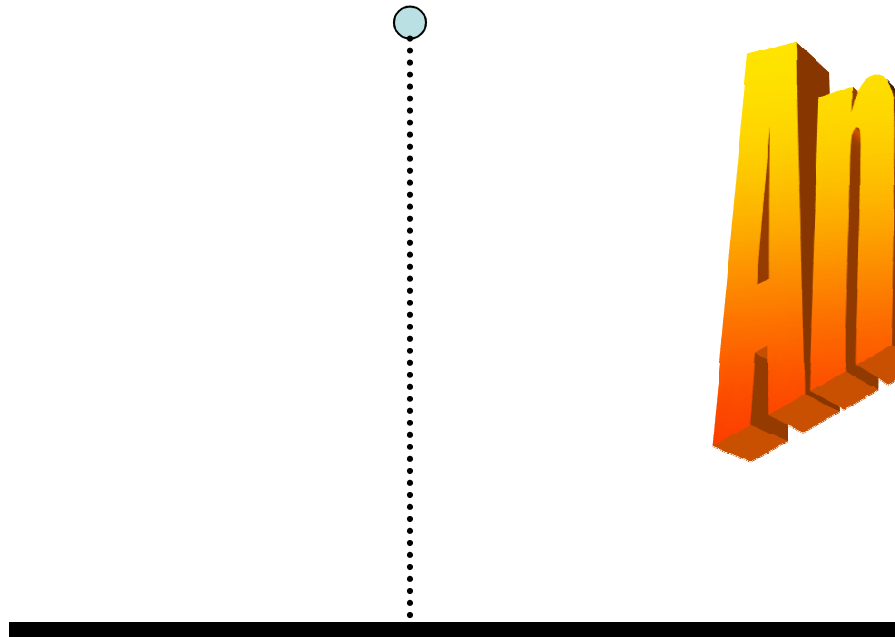
- 
- **Vectors can be represented by an arrow to show magnitude and direction**

- **On your whiteboards, draw the direction of acceleration for the following objects.**
- **The dashed line represents its path.**
- *** *not drawn to scale***

#1. A pebble dropped from a bridge

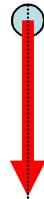
*

ANSWER



#1. A pebble dropped from a bridge

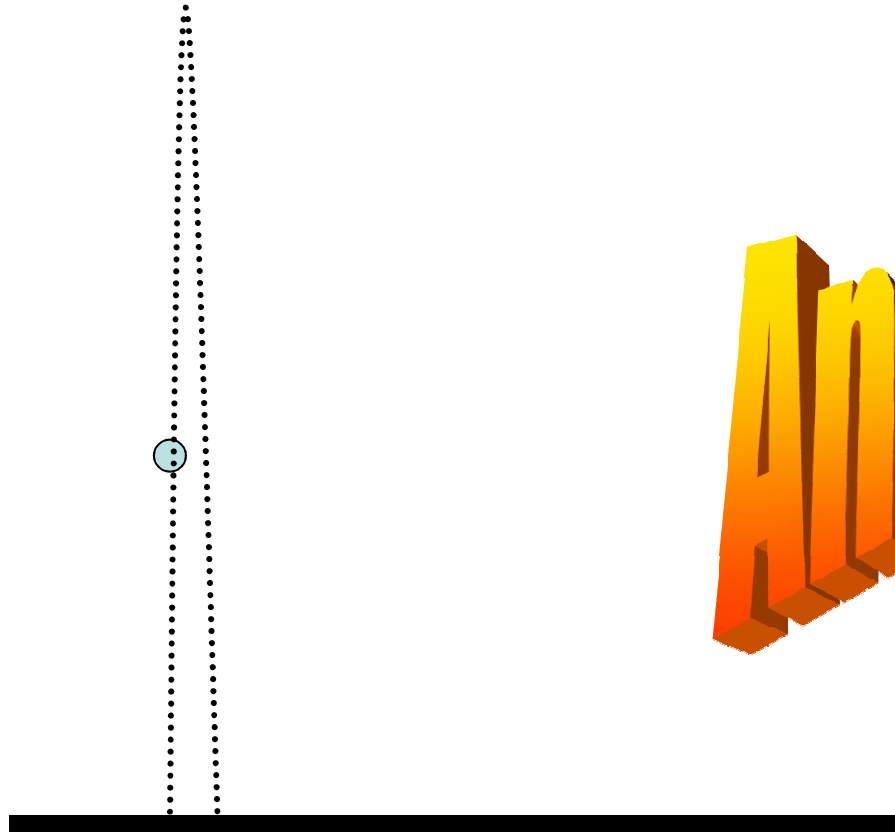
*



The vector is oriented down.

#2. A baseball tossed up in the air, halfway up the path

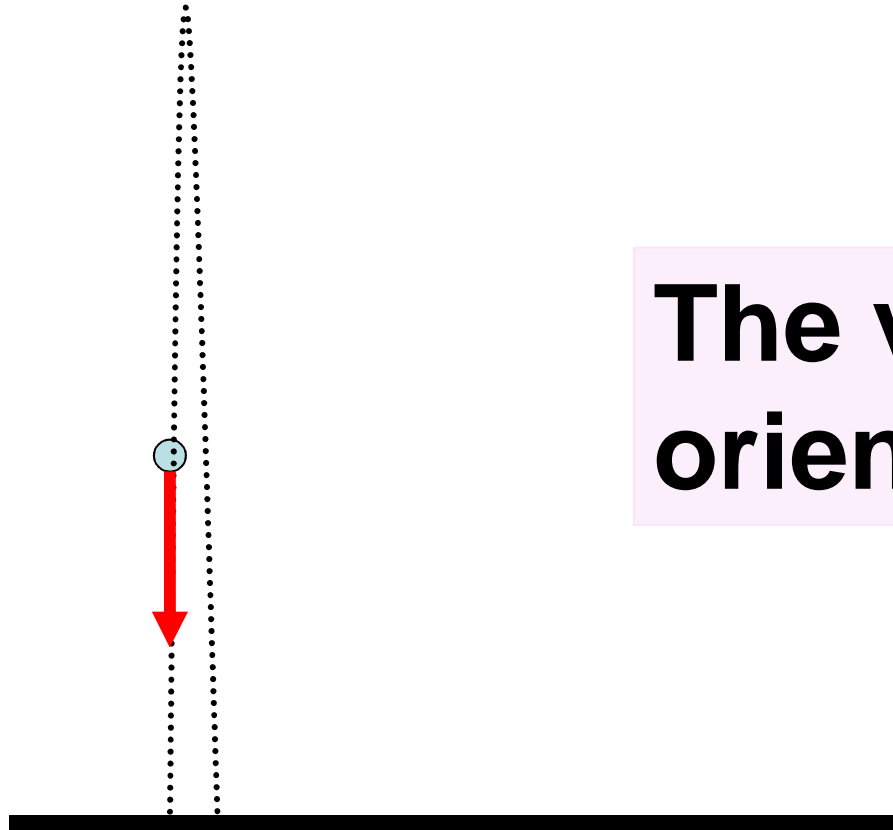
*



ANSWER

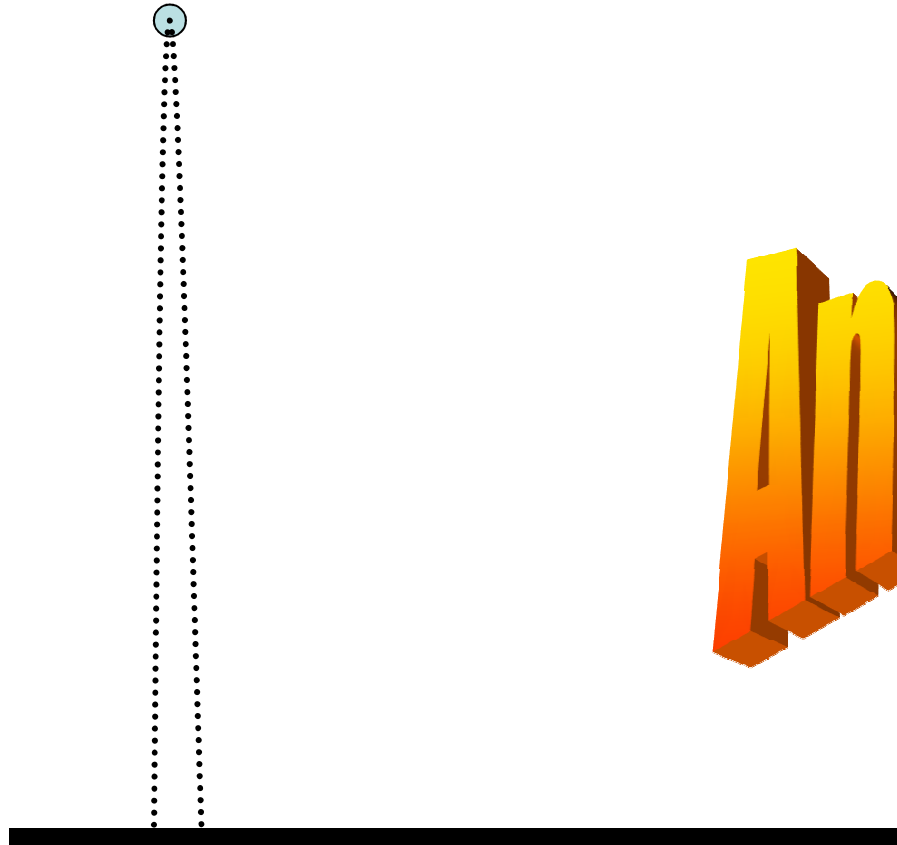
#2. A baseball tossed up in the air, halfway up the path

*



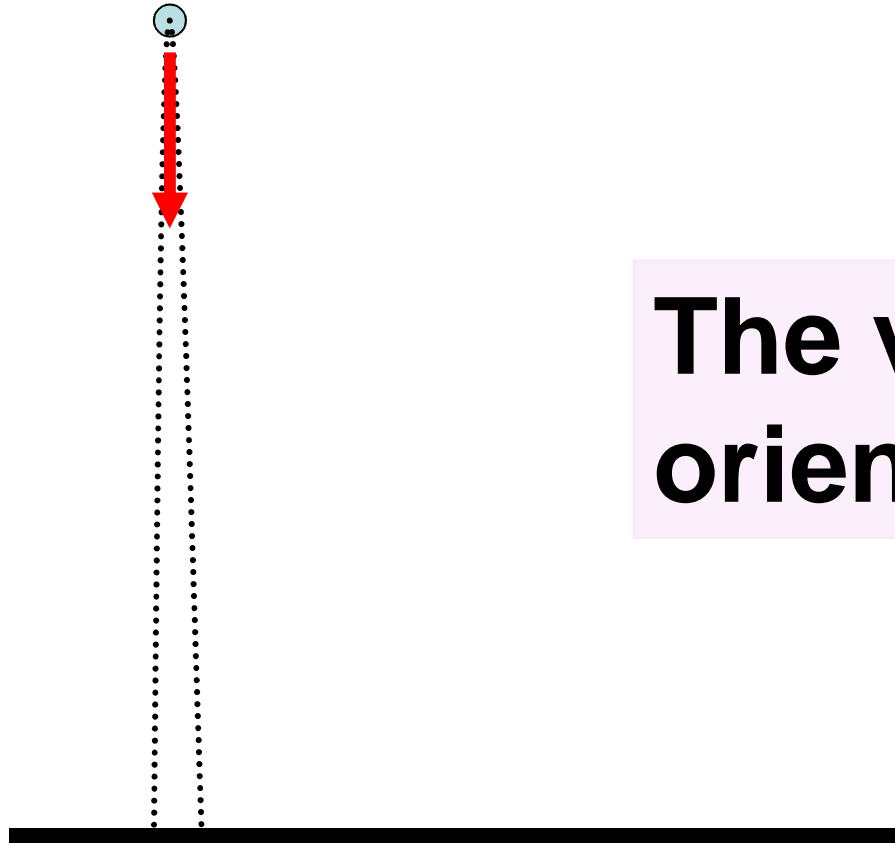
The vector is oriented down.

#3. A baseball tossed up in the air,
* at the top



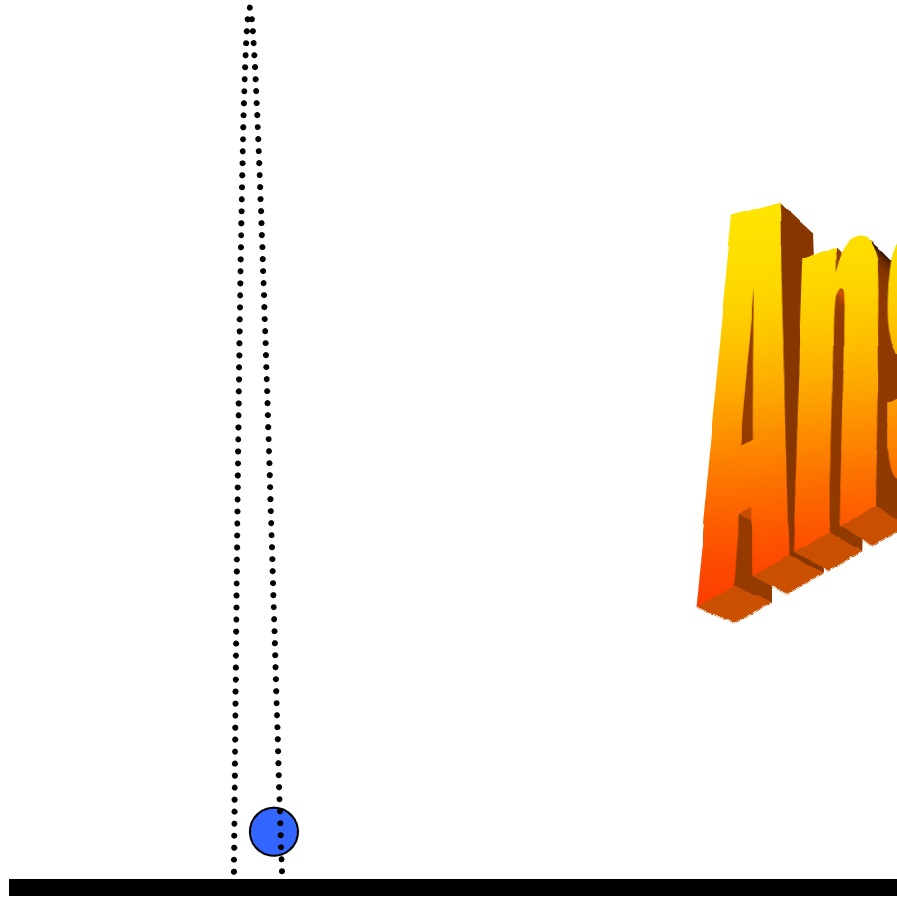
ANSWER

#3. A baseball tossed up in the air,
* at the top



**The vector is
oriented down.**

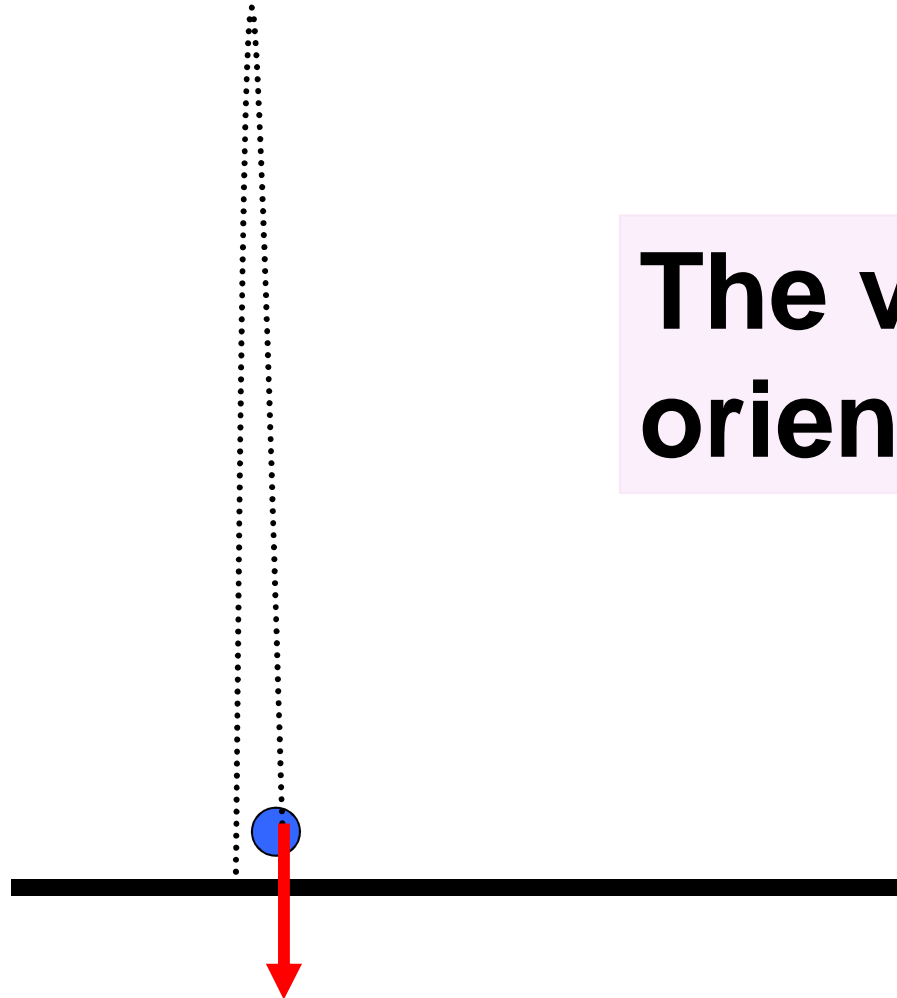
#4. A baseball tossed up in the
* air, right before it strikes the
ground



ANSWER

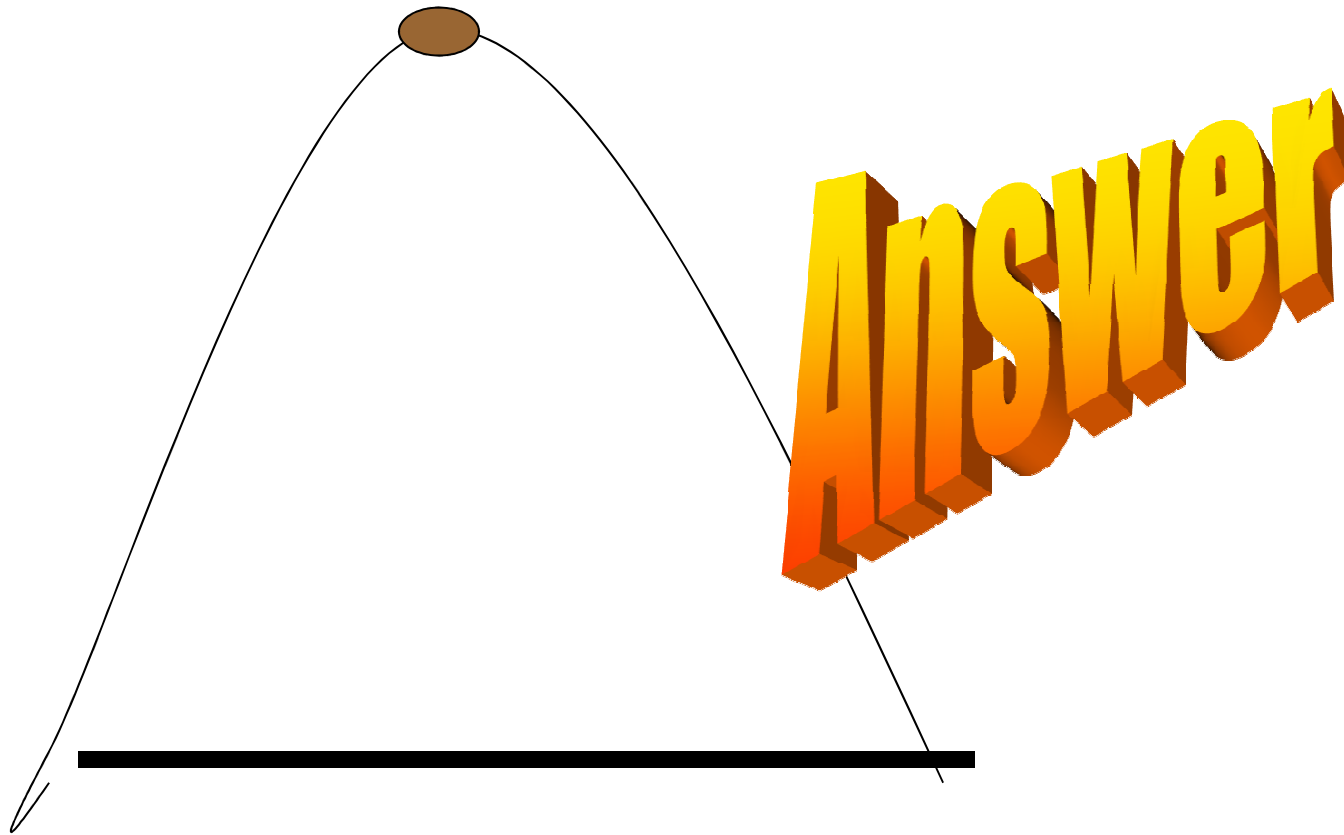
#4. A baseball tossed up in the air, right before it strikes the ground

*

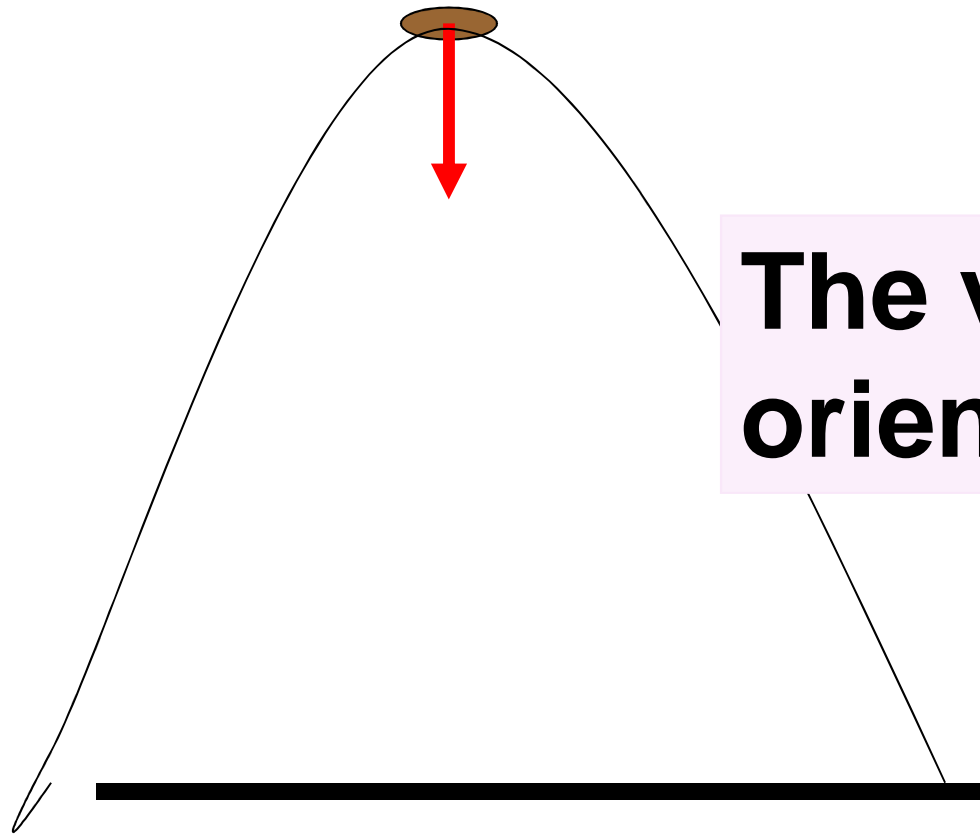


The vector is oriented down.

#5. A football is thrown at a 45°
* angle, at the top of its path



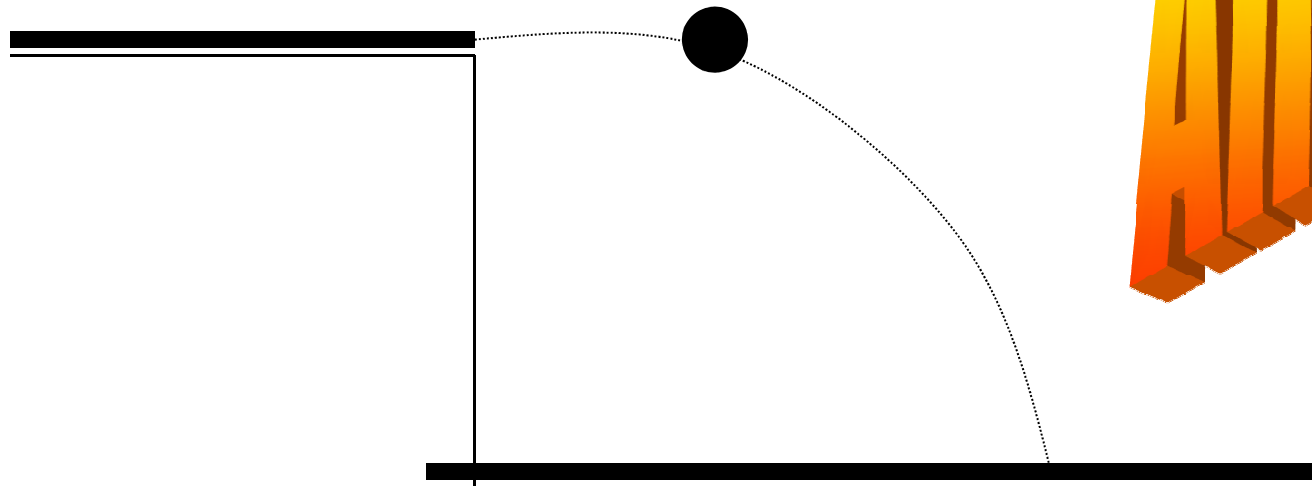
#5. A football is thrown at a 45°
* angle, at the top of its path



**The vector is
oriented down.**

#6. A cannonball rolling off a table

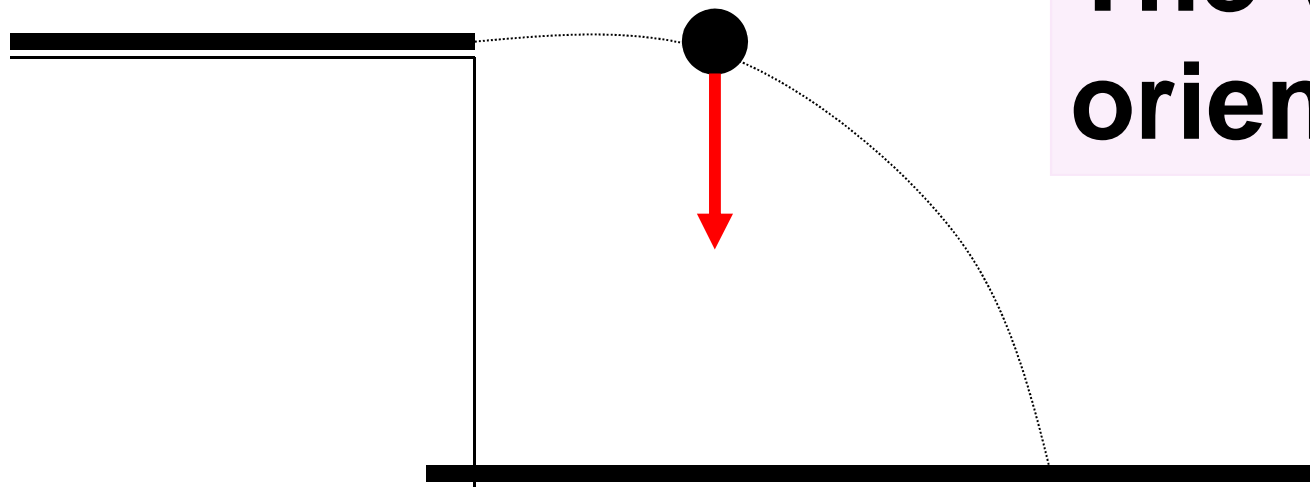
*



ANSWER

#6. A cannonball rolling off a table

*



The vector is oriented down.

- What can you summarize about the direction of the vector representing acceleration of all these objects?
- What are other examples?

- The rock pebble football and all have different masses. How does this affect the *magnitude* of the **acceleration** vectors?
- On Earth, what would its *magnitude* be?