

Gravity Day 2-

What is this picture showing?



Learning Targets:

I can explain what gravity is and identify where it can be observed in space.

I can give an example of how scientists are studying the impacts of microgravity on humans.

Review

People often say that there is no gravity in space. Explain why this is not accurate.

Review

Rather than say that there is no gravity in space, what would be more accurate to say?

Gravity:

Gravity is a force of attraction between objects (with mass)

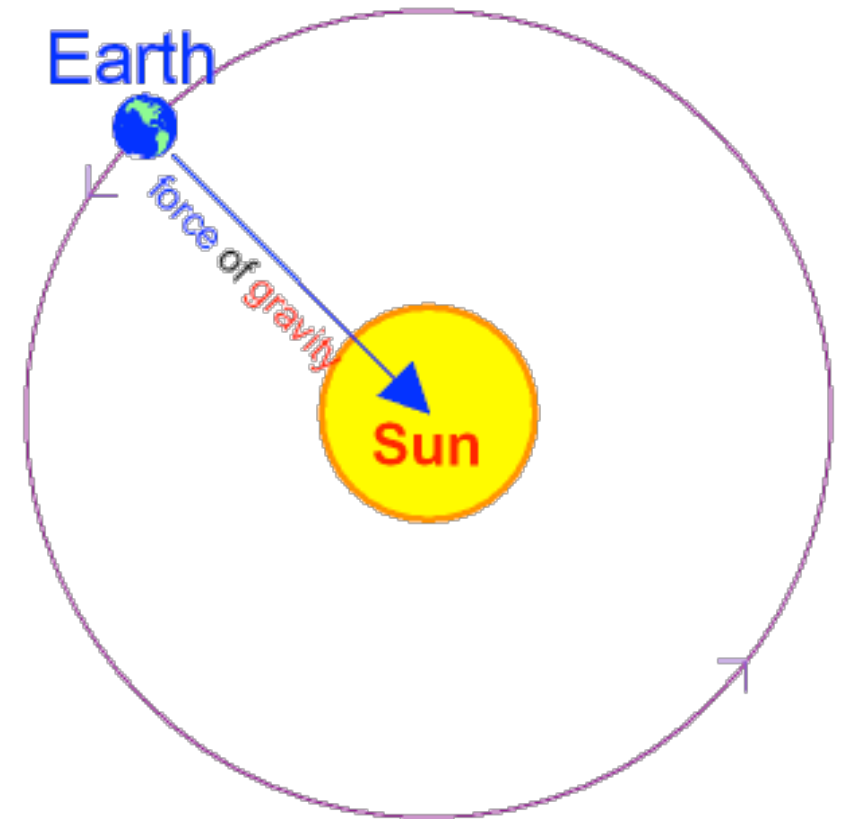
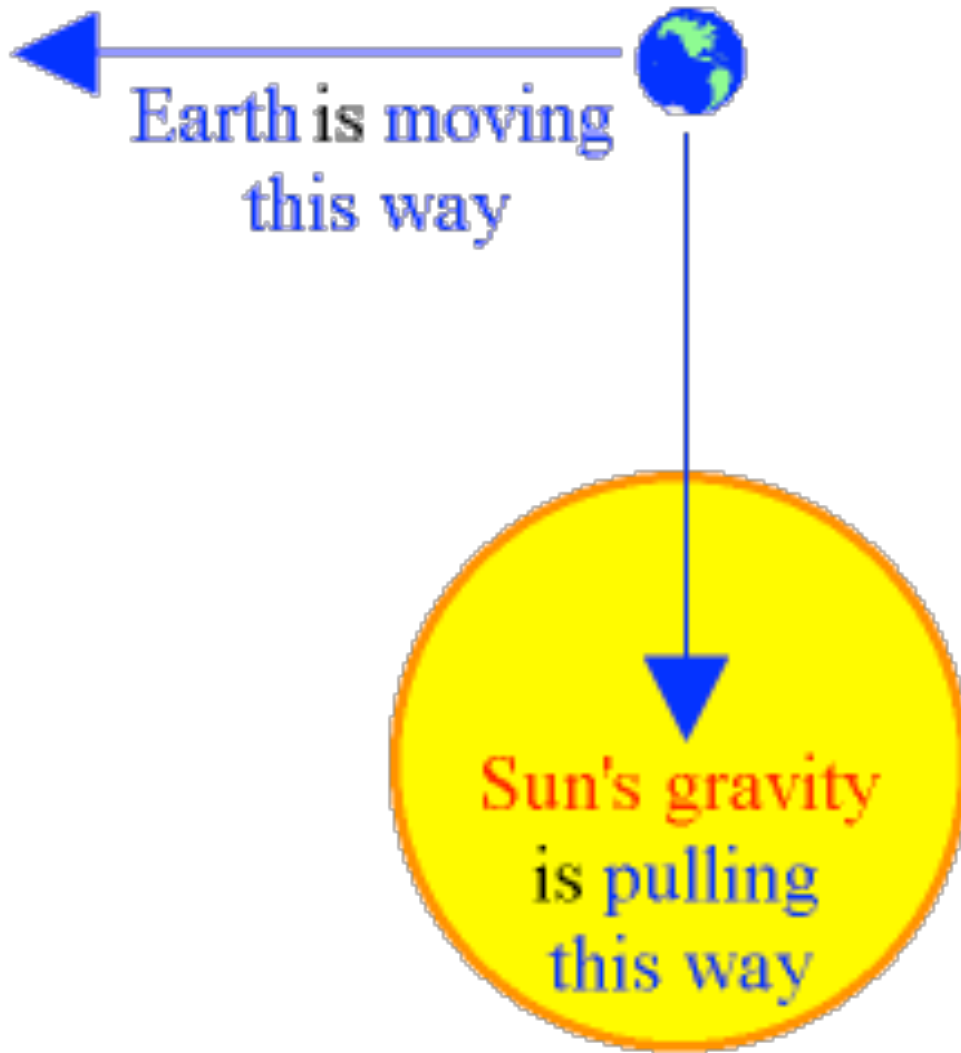
Everything that is anything has mass, thus everything has gravity

The greater the mass of an object the greater the gravitational force.

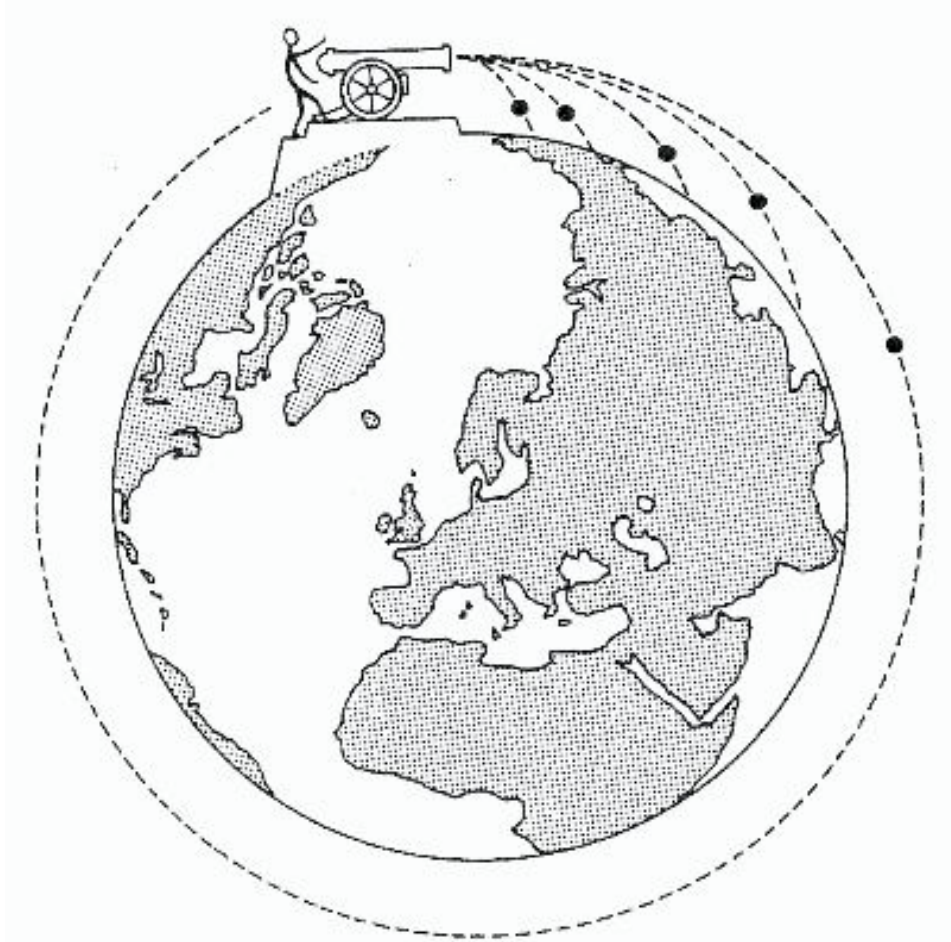
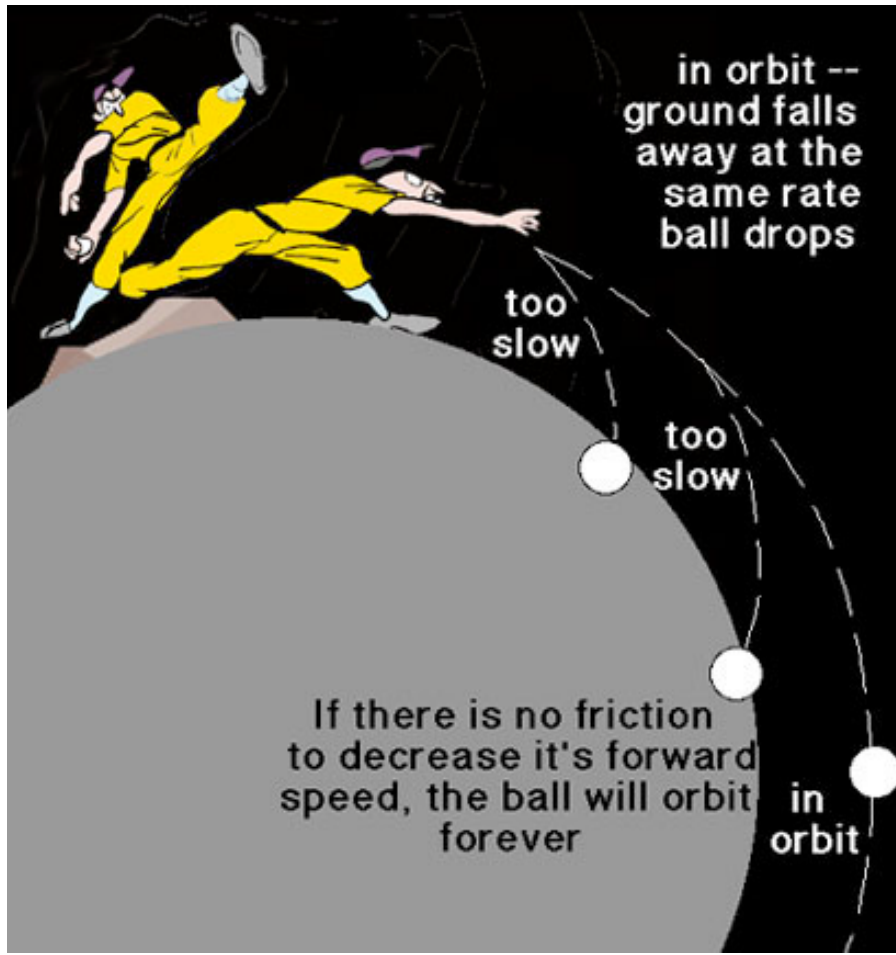
orbit - When an object circles around another object, such as a moon or satellite circling a planet.



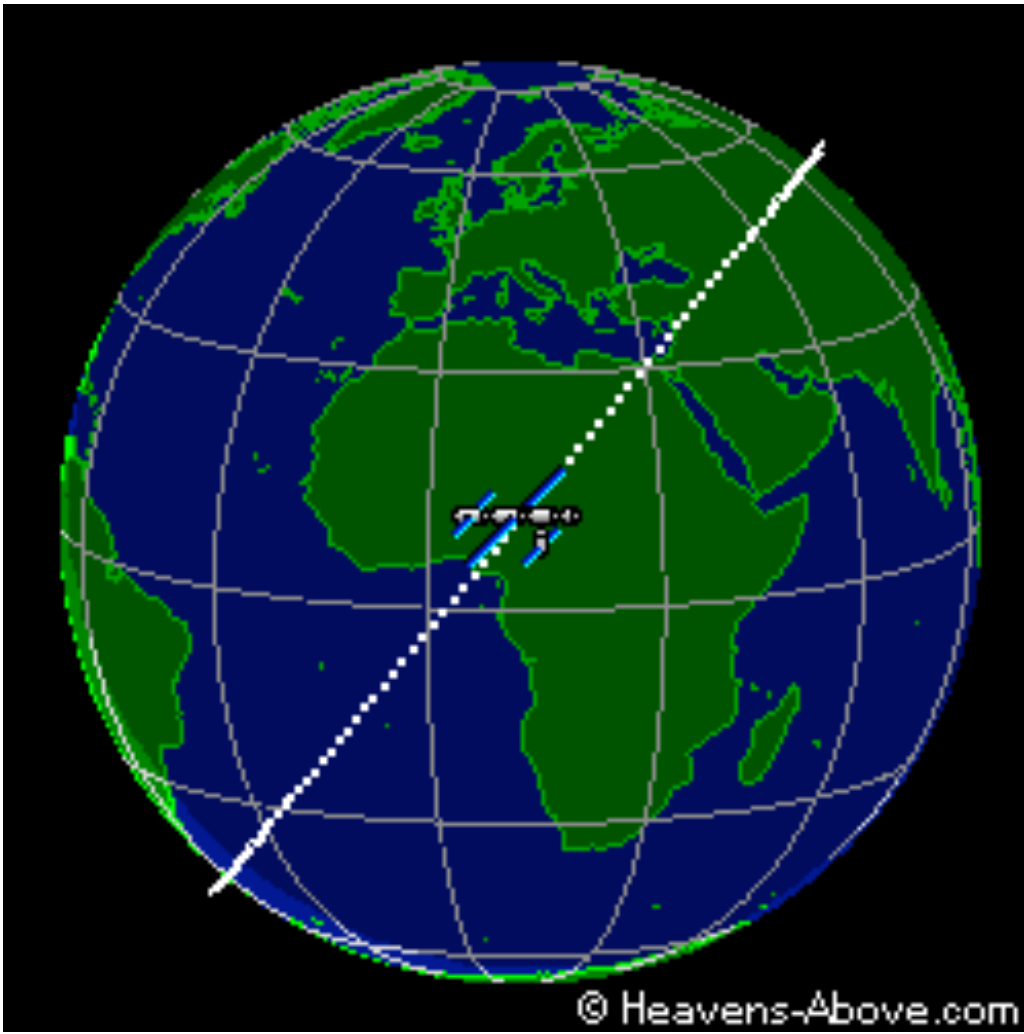
Orbits are caused by the pull of gravity



Orbits happen when an object is constantly falling - it never lands, but doesn't escape into space either.



The International Space Station (ISS) is in orbit around Earth.

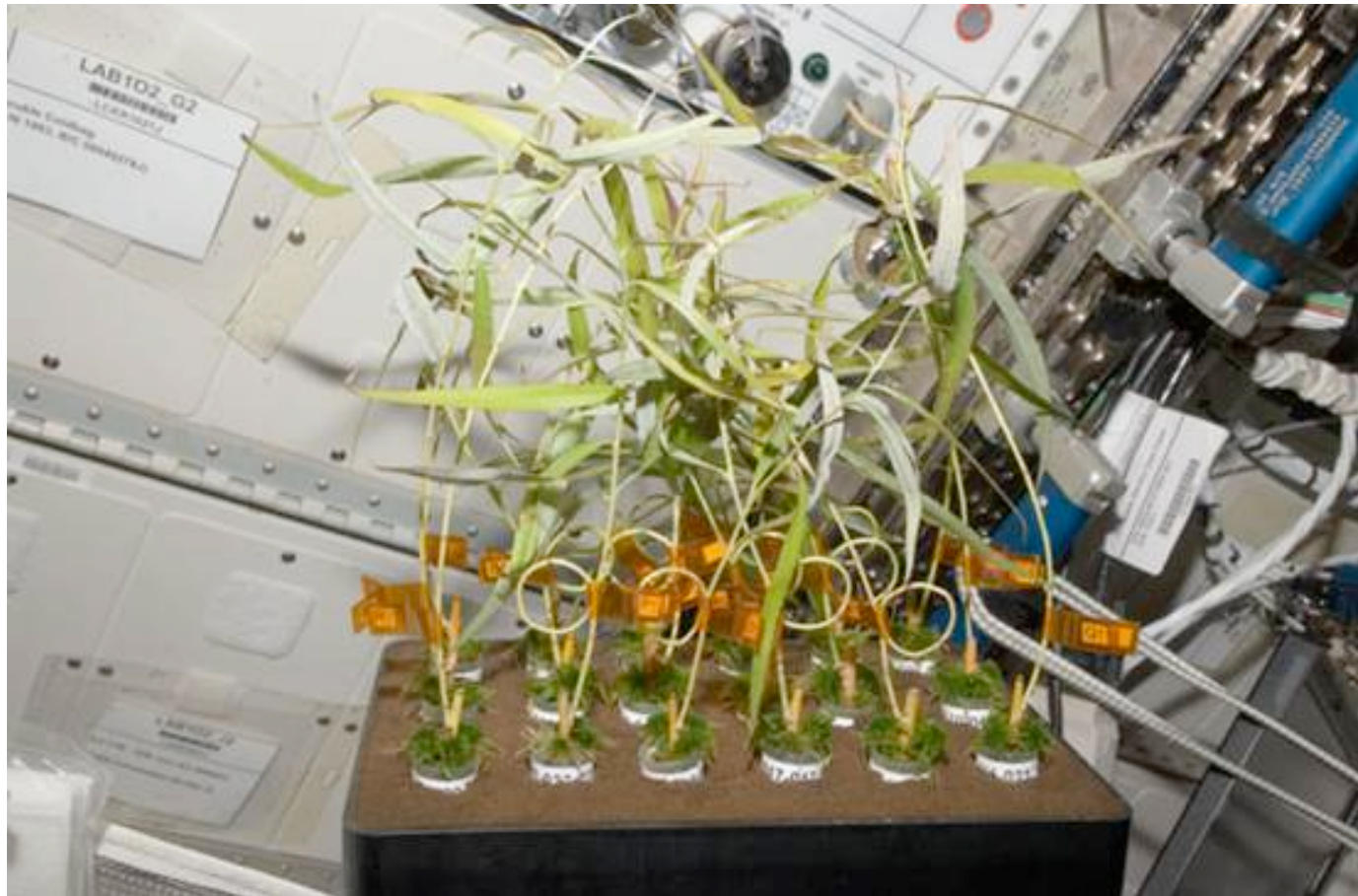


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Earth's gravity keeps it from escaping into space, but because the station does not have very much mass, the gravitational pull is very small and astronauts cannot feel it. This leads to "weightlessness."



This “weightlessness” is called “micro-gravity.” Scientists are conducting many experiments on the ISS to study the effects of microgravity on humans so that we can plan for future space travel.



ISS Space Videos

Tour the Space Station:

<https://www.youtube.com/watch?v=bGvA8kS-5M>

Washing Hair:

<https://www.youtube.com/watch?v=kOlj7AgonHM>

Monday:

www.usatoday.com/videos/embed/100836762

ISS Space Videos

Wash Cloth In Space:

<https://www.youtube.com/watch?v=o8TssbmY-GM>

What happened?

What did it have to do with gravity?

Is it accurate to say that there is no gravity at the International Space Station?

Review:

Is it accurate to say
there is no gravity
on the International
Space Station?

ASSIGNMENT:

Use the links on my blog to learn about experiments happening on the ISS. Use at least **two links**, and write down information about at least **three experiments**.