What are the planets in our solar system?

Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune are the planets in our solar system.

**Outer Space Notes** 

Universe: all of space and time and their contents.

Galaxy: large group of stars and matter grouped together.

Solar System: a star and all the objects that orbit it

Planet: large objects that revolve around a star in a solar system.

Orbit: the path of one body around another

Gravity depends on mass of objects, more mass=more gravity

# 3/31

What is an orbit?

An orbit is the path of one body around another

# 4/1

What is at the center of our solar system?

The Sun is at the center of our solar system.

How do stars form?

Stars start off as nebulae, big clouds of gas. These nebulae then collapse, and nuclear fusion begins. Fusion releases energy, light, and heat.

What process powers a star?

Nuclear fusion powers almost all stars

How do stars form?

Stars start off as nebulae, big clouds of gas. These nebulae then collapse, and nuclear fusion begins. Fusion releases energy, light, and heat.

# 4/3

What is a galaxy?

A Galaxy is a collection of hundreds of thousands to trillions of stars.

#### 4/4

What object does the earth orbit around?

The Moon naturally orbits the Earth.

# 4/7

What causes the Moon to light up in the sky?

The reflected light of the Sun causes the Moon to light up.

# 4/14

Last night was a Full Moon. What Moon phase will we see tonight?

If last night we saw a Full Moon, tonight we will see a waning gibbous. This is because the Moon cycles through predictable phases, and waning gibbous is always the phase following Full Moon.

5 Observations and one Inference from Sun, earth, moon animation video.

What is the Earth's axis?

The axis is an imaginary line running through the Earth, on which the Earth rotates. The tilt of the Earth on it's axis is the reason we experience the seasons here on Earth.

#### 4/16

What Moon phase follows a Waning Crescent Moon?

The moon phase following a waning crescent is a New Moon.

#### 4/18

When do quiz retakes usually occur?

Quiz retakes usually occur on weekdays after school.

#### 4/28

What are the four rocky planets?

Mercury, Venus, Earth, and Mars are the four rocky planets

# 4/29

What is the largest of Earth's layers?

The mantle is the Earth's largest layer.

Answered these questions based on the 4/29 The Layers of the Earth reading

- 1. What are the 4 main layers of the Earth?
- 2. What is the difference between continental and oceanic crust?
- 3. What causes the movement of tectonic plates?
- 4. What are three differences between the inner and outer core?

What is the difference between the outer and inner core?

The outer core is cooler and made of liquid metal, while the inner core is hotter and solid metal.

#### 5/1

What are 2 differences between the core and the mantle?

The core is hotter and made of metal, while the mantle is cooler and made of semisolid rock.

# 5/2

What is a tectonic plate?

A tectonic plate is a large piece of the Earth's crust that moves as result of the mantle's convection currents

# 5/5

What causes tectonic plates to move?

Convection currents in the mantle cause the tectonic plates above to move.

# 5/6 or 5/7

What evidence do scientists have of Pangea's existence?

Scientists have fossil and rock evidence that Pangea existed about 200 mya.

#### 5/9

How often do we have quizzes in science?

We have quizzes in science class about once a month.

What type of plate boundaries do earthquakes usually occur at?

Earthquakes occur at transform and convergent plate boundaries.

### 5/13

What are the three types of plate boundaries?

The three types of plate boundaries are convergent, divergent, and transform boundaries.

1. What happens at a divergent boundary?

At divergent boundaries plates spread apart, and lava from the mantle rises up and cools, forming new crust

2. What is subduction?

During subduction denser oceanic plates get pushed under light continental plates, forming deep ocean trenches and volcanoes.

3. What happens when two continents collide?

When two continents collide the plates fold and rise, creating mountains

4. What is different about transform boundaries?

At transform boundaries plates move past one another, causing earthquakes.

#### 5/14

What causes tectonic plates to move?

Convection currents in the mantle cause tectonic plates to move.

# 5/15

What caused Pangea to split up?

Convection currents in the mantle cause tectonic plates to move. This movement caused Pangea to separate about 200 million years ago.

What system sends signals throughout the body?

The Nervous System sends signals throughout the body.

#### 5/19

What type of rock has fossils in it?

Sedimentary rock has fossils in it.

# 5/20

What happens at convergent plate boundaries?

At convergent boundaries plates collide with each other.

# 5/21

What is matter?

Matter is anything that has mass and volume.

#### Waves

Waves: disturbances that transfer energy from one place to another Wavelength: distance it takes a wave to complete a full period Amplitude: distance between the top of a wave and the undisturbed state Frequency: number of complete waves passing a fixed point in 1s

Period: how long it takes for one wavelength to pass

# 5/22

What is wavelength?

Wavelength is how long it takes a wave to complete one cycle.

What is a wave's amplitude?

Amplitude is the distance from the top of a wave to the undisturbed point. So basically how tall a wave is.

# 5/27

What is a wave's frequency?

Frequency is how often a wave repeats in 1 second of time.

# 5/28

What is a medium?

A medium is the material a wave travels through.

# 5/29

What topic are you least confident in going into the Final Exam?

Common things students cited were cells, moon phases, and body systems.

# 5/30

What 3 things can you use to study for your Final Exam?

Things we can use to study include the virtual notebook, virtual wordwall, and resources on the 6A homework website.

# 6/2

What does the respiratory system do?

The respiratory system transports oxygen into the body and gets rid of carbon dioxide.

What are the steps of the Scientific Method?

The Scientific Method has 6 steps

- 1. Observation
- 2. Question
- 3. Hypothesis
- 4. Experiment
- 5. Collect & Analyze Data
- 6. Conclusion