

Name _____ Date _____ Period _____

Modeling the Earth & Moon Relationship



Initial Choice

Ball representing the Earth _____ Ball representing the Moon _____

Justify why you chose these particular balls to represent the Earth & Moon.

Diameters

Diameter of Earth _____ km Diameter of Earth ball _____ cm

Diameter of Moon _____ km Diameter of Moon ball _____ cm

Revised Choice

Ball representing the Earth _____ Diameter _____ cm

Ball representing the Moon _____ Diameter _____ cm

Justify why you chose to keep these particular balls *or* to change the ball(s) used to represent the Earth & Moon.

Ratios

Ratio of Earth: Moon (actual) ____:____ Ratio of Earth: Moon (balls) ____:____

Final Choice

Ball representing the Earth _____ Ball representing the Moon _____

Justify why you chose these particular balls to represent the Earth & Moon. Refer to data given and collected during this activity as evidence.

Distance between the Earth and Moon

Measured distance between Earth and Moon models _____

Justify why you chose to place the Earth & Moon this distance apart from one another.

Actual Distance between Earth and Moon (in km) _____

What is the ratio between the distance of the Moon and the diameter of the Earth?

[Earth to Moon distance _____ : Diameter of Earth _____] = [_____]

How many Earth objects would fit in a straight line between your model Earth and Moon? -

Place the Earth and Moon models at the correct distance. What is the new distance between your Earth and Moon models? _____

Is this further or closer than you expected?

Exit Slip

See your teacher for your copy of *How Big is the Moon?* to retake the assessment.