

**M O D E R N E A R T H S C I E N C E****Transparency Worksheet 48  
The Earth-Moon System**

1. What force holds the earth-moon system together?

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2. Compare the orbit of the moon as seen from the earth with the orbit of the moon as seen from space.

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3. What does the blue line in the diagram represent?

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4. According to the diagram, where does the balance point of the earth-moon system lie?

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5. What would happen to the balance point of the earth-moon system if the moon were more massive?

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Transparency Worksheet 49  
**Solar and Lunar Eclipses**

1. What is the difference between a total and a partial solar eclipse?

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2. Are total solar eclipses visible from anywhere on the earth? Explain.

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3. How could you modify the top diagram to represent an annular eclipse?

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4. Why don't we see solar and lunar eclipses every lunar cycle?

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5. If the moon's orbital plane were  $0^\circ$  rather than  $5^\circ$ , how often would solar and lunar eclipses occur? Where would they be seen?

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