Why Can't We See the "Hidden Part" of the Moon?

This Squeak activity has a model of the moon flight (orbiting) around earth while spinning on its axis.

The moon spin speed and the moon angular orbit speed can be set by the user.

When the values of these 2 speeds are the same, there is part of the moon that is hidden from us. When these values are not the same, there is no part of the moon that can't be seen from earth.

No Squeak knowledge is needed for demonstration purposes.

This model can be programmed by 4th-5th graders with knowledge of "basic" menu and some teacher's guidance for the use of properties of one object by another object.

Detailed instructions of scripting in: "Sun Earth and Moon" project bellow.

Science Key Words: Earth; Moon; Spin; Orbit;
Math Key Words: Spin; Orbits; Center of Rotation; Circle; Radius;
Squeak Key Words; X and Y coordinates; Forward by-; Turn by-;
Properties of 2 objects in one script;

Grade Level: Elementary**,** Middle School, High School

Squeak Project: Moon around Earth
Related projects: Sun Earth Moon