

★ MILD CHALLENGE

Sun-Earth-Moon System

✓ Your Mission:

- ☐ Put the Sun in the center (it's the biggest!)
- ☐ Make Earth go around the Sun using `forever` blocks
- ☐ Make the Moon go around Earth using `run parallel`

💡 Key Words:

Orbit: The path something takes around another object

Solar System: The Sun and everything that goes around it

🚀 Speed Suggestions:

Earth: 15 seconds to go around the Sun

Moon: 3 seconds to go around Earth

🆘 Getting Stuck?

- Your Sun and Earth are already there!
- Add the Moon and make it orbit Earth
- Try different speeds until it looks realistic

★★ HOT CHALLENGE

Inner Solar System (5 Objects)

✓ Your Mission:

- ☐ Add Mercury, Venus, and Mars using `run parallel`
- ☐ Put planets in the right order from the Sun
- ☐ Use `forever` blocks to make them move at different speeds

💡 Planet Order (closest to farthest):

1. **Mercury** (fastest)
2. **Venus**
3. **Earth**
4. **Mars** (slowest)

🚀 Speed Suggestions:

Mercury: 5 seconds

Venus: 10 seconds

Earth: 15 seconds

Mars: 20 seconds

🆘 Getting Stuck?

- Sun and Earth are already in your template!
- Add Mercury, Venus, Mars in the right order
- Use the speed suggestions above

☆☆☆ SPICY CHALLENGE

Full Solar System + Rotation

✓ Your Mission:

- ☐ Add all 8 planets using `run parallel`
- ☐ Use `forever` blocks for different orbit speeds
- ☐ Add planet rotation (spinning) - advanced!

☀ All 8 Planets:

Inner: Mercury, Venus, Earth, Mars

Outer: Jupiter, Saturn, Uranus, Neptune

Rotation: Planets spinning like tops

🚀 Speed Suggestions:

Mercury: 5 sec

Venus: 10 sec

Earth: 15 sec

Mars: 20 sec

Jupiter: 25 sec

Saturn: 30 sec

Uranus: 35 sec

Neptune: 40 sec

🆘 Getting Stuck?

- Sun and Earth are in your template - build from there!
- Add planets one at a time using the speeds above
- Ask for help with the spinning (rotation) part
- Work with a partner - this is the hardest challenge!



Notes & Ideas

Use this space for
additional challenges
or student notes