⭐ 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

```
▶ When Play clicked
forever
    run parallel ⚙
```

⭐⭐ 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)
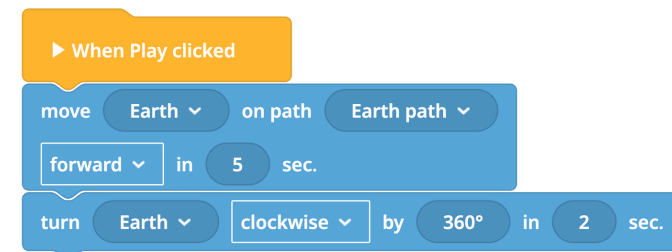
🚀 Speed Suggestions:

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

```
▶ When Play clicked
move  Earth ⌄  on path  Earth path ⌄
      forward ⌄  in  5  sec.
turn  Earth ⌄   clockwise ⌄  by  360°  in  2  sec.
```

★★★ SPICY CHALLENGE

FullSolarSystem + 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:**

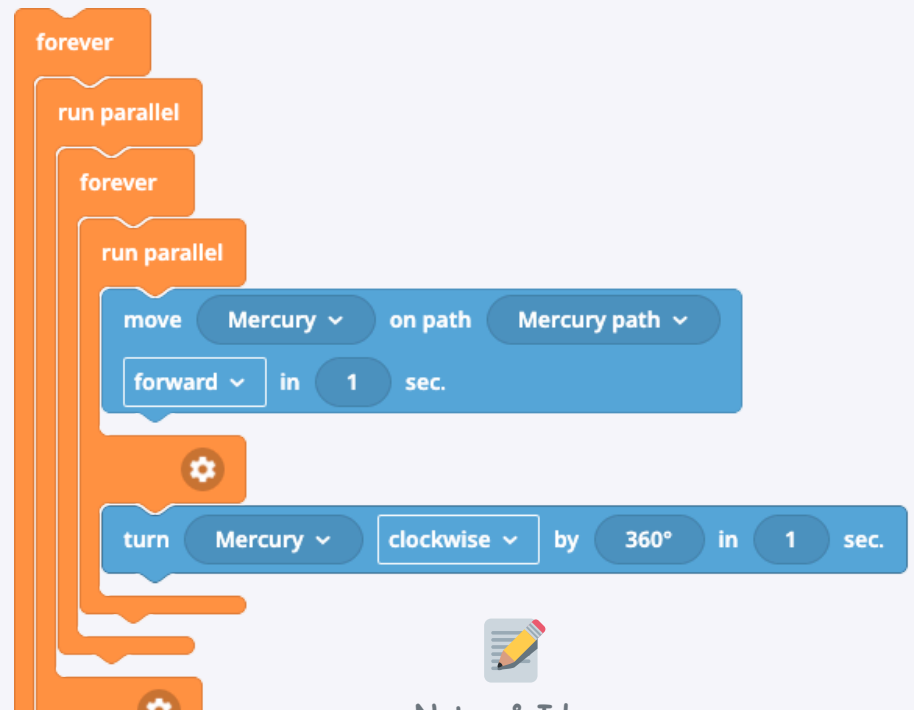|	
Mercury: 5 sec	**Jupiter:** 25 sec
Venus: 10 sec	**Saturn:** 30 sec
Earth: 15 sec	**Uranus:** 35 sec
Mars: 20 sec	**Neptune:** 40 sec

🆘 **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!

```
forever
  run parallel
    forever
      run parallel
        move [Mercury ▾] on path [Mercury path ▾]
        [forward ▾] in [1] sec.
        ⚙
        turn [Mercury ▾] [clockwise ▾] by [360°] in [1] sec.
      ⚙
```

📝 **Notes & Ideas**

Use this space for additional challenges or student notes