

TARWATER ELEMENTARY SCHOOL STEM LAB

Activity ID: **E-1**

Activity Name: **Walking the Planets**

MATERIALS:

Materials Provided in Bin:

Item:	Quantity:	Notes:
Lesson Plan	1	
Planet Cards	10	
Poster of Planets	1	

Materials In STEM lab or Classroom (Common Items):

Item:	Quantity:	Notes:
None		

Materials Teacher/Parents Need to Provide:

Item:	Quantity:	Notes:
None		

WHAT ARE WE DOING?

Creating a visual representation of distance between the planets

VIDEOS / LINKS:

<https://youtu.be/Qd6nIM2QIWw> - can also be obtained searching for "Exploring Our Solar System: Planets And Space for Kids"

SAFETY NOTES:

Think about how to communicate to the group when they are spread out on the field doing the activity- perhaps come up with hand signals or use a whistle

SCIENCE TERMS:

Solar System - The Solar System is made up of all the planets that orbit our Sun. In addition to planets, the Solar System also consists of moons, comets, asteroids, minor planets, and dust and gas. Everything in the Solar System orbits or revolves around the Sun.

Orbit - the path taken by one body circling around another body. The earth makes an orbit around the sun.

Sun - the star around which the planets orbit

Planet - is a body that orbits the Sun and is massive enough for its own gravity to make it round

STEPS:

1. Show video
2. Discuss distance between the planets before going outside
3. Discuss how to communicate while on the field; including safety instructions
4. Have first student(s) start at the card marked sun and stay there
5. Have remaining students take steps to get to the card marked Mercury (based on steps noted below). Student(s) stay at Mercury
6. Continue on to the end of the planets having student(s) stay at subsequent planet locations;

	Steps from Sun	Steps to Take Away from Last Planet
Sun	-	-
Mercury	2.0	2.0
Venus	3.6	1.6
Earth	6.0	2.4
Mars	7.6	1.6
Jupiter	26.0	18.4
Saturn	48.0	22.0
Uranus	96.0	48.0
Neptune	150.5	54.5
Pluto	197.5	47.0

QUESTIONS TO ASK STUDENTS:

Things to get them thinking

What would they change, what would they add to this if they could, that sort of thing

1. Which planet do you think is the warmest/coldest and why? (*hint for teacher: Venus is the hottest planet*)
2. Is Earth closer to Mercury or Jupiter?
3. Which planets are next to Earth?

CLEAN-UP:

Into the Bin = lesson/ Poster/ Planet Cards

Back to lab/Classroom = n/a

Trash/Recycle= n/a

IF RUNNING OUT OF A SUPPLY IN THE BIN, PLEASE
CONTACT LAURIE JONES IN THE OFFICE (X4307)
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SUN

MERCURY

VENUS

EARTH

MARS

JUPITER

SATURN

URANUS

NEPTUNE

PLUTO