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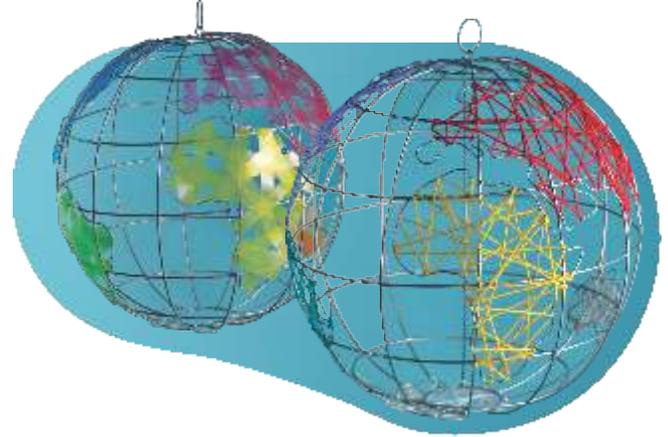


F66547

## Wire Weaving World

For product information and video, please visit our website at <http://roylco.com/shop/wire-weaving-world-f66547/?v=3e8d115eb4b3>

Congratulations! You are preparing to create a fun classroom experience with your new *Wire Weaving World* (F66547). Our mission is to develop high quality materials that exceptional teachers can use to enrich, focus and motivate their students in new and exciting ways. Our name says it all, FEWW: Fire, Earth Wind and Water. We believe in experiential learning: encouraging children to self-direct, reflect and grow their understanding through educational play and projects.



Our *Wire Weaving World* (F66547) is both sturdy and covered in a rust-resistant coating so you can hang it in the classroom or outside. Introduce students to world geography, relative size and distance and estimation in a fun and creative setting. Used as a base for ribbon, paper or pipe cleaner weaving projects this globe helps develop both gross and fine motor skills. For even more fun try filling a large pail with bubble solution and dip in the globe. Blow on the surface of the globe and watch the iridescent mini tornadoes, hurricanes and wind patterns.

### Let's Talk About Globes!

What is a globe? A globe is a spherical map of the earth (**terrestrial** or **geographical** globe). Traditionally globes were made of paper glued to a wooden sphere but today most classroom globes are made from plastic. Our modern-day word "globe" comes from the Latin word "**Globus**" which means a round mass or sphere. Globes can be made to show the surface of moons or other planets. Sometimes globes are made to show where the stars and constellations are in the sky. These are called **Celestial Globes**.

Globes can be made in many different sizes! The globes used in classrooms are usually close to 30 cm (1 foot) across at their widest point (**diameter**). Some globes are made to be a meter in diameter. The largest globe in the world is called the Unisphere. It is located in New York and is (120 feet) in diameter. In the 1800s pocket-sized globes (less than 8 cm or 3" across) were used to teach wealthy children.

How long have globes been around? The oldest globe discovered was made in Ancient Turkey in the second century BC. Do you know the phrase "Here there be dragons?" Scholars think it originated in Latin on the **Hunt-Lenox Globe** in 1510. The Latin phrase is "**Hic sunt draconae.**" The first globe to have North America on it was made in 1504 from an ostrich egg and was discovered in 2012.



## Parallels and Meridians



Have you noticed all the up and down (**vertical**) and side to side (**horizontal**) lines on a globe? These are lines of **longitude** and **latitude** and they help us navigate on globes and in real life.

Latitude lines are horizontal (**east to west**) lines on a globe. Sometimes these lines are called **parallels** because they are always the same distance apart and they never touch or cross. You probably know the most famous latitude line: the **Equator**. The Equator is like a belt going around the middle of the earth at its widest point. The Equator is at zero degrees latitude and divides the globe into Northern and Southern **Hemispheres**. There are four other important parallels. You might have heard of them: The **Arctic Circle**, the **Tropic of Cancer**, the **Tropic of Capricorn** and the **Antarctic Circle**. Because the Earth is spherical the diameter of latitude lines get smaller the further they are from the Equator. Why are parallels

important? The Arctic and Antarctic circles mark the farthest points where the sun can stay above or below the **horizon** for twenty-four hours at the **solstices**. The Tropics of Cancer and Capricorn enclose the area where the sun is directly above your head at the solstices. Sometimes a parallel is used to represent all or part of a border between two countries. A good example is the **49th Parallel** which separates most of Canada from the United States.

Lines of longitude are the vertical (**north to south**) lines on a globe. These lines are often called **meridians**. Meridians are half circles going from the North Pole to the South Pole unlike parallels which are full circles. All the meridians cross (are **perpendicular** to) all the parallels. All the meridians are the same length. The most important meridian is called the **Prime Meridian**. Why is the Prime Meridian important? Because it helps us tell time. The Prime Meridian goes through Greenwich, England and is set at zero degrees. The word “meridian” comes from the Latin word “**meridies**” which means midday. This Latin **root word** gives us A.M. and P.M. which stand for **ante meridian** and **post meridian**. The sun crosses the Prime Meridian halfway between sunrise and sunset so we know exactly when noon is. The Prime Meridian divides the globe into Eastern and Western hemispheres.

## Axial Tilt

Why isn't the tabletop globe in the classroom standing straight up and down? This is because globes on stands are usually on a twenty-three and a half degree tilt to show how Earth is tilted in relation to the sun. If the Earth wasn't tilted we wouldn't have any seasons! This tilt helps makes the globe easier to read.



## Globe Surfaces

What texture is the surface of a globe? Lots of globes have flat and smooth surfaces. Some globes have a textured surface showing features of the earth like mountains or rivers or valleys. A globe showing the different heights of mountains and valleys is showing **topography**.



## Globe Art

Weave and wrap for wild creations! Use yarn, ribbon, string or pipe cleaners to add color to your F66547 *Wire Weaving World*.



Use our suggestions or invent your own ideas. Try wrapping pipe cleaners around the edges of the continents. Make the oceans wavy with ribbons woven through the wires.

Suggest that students choose their seven favorite colors and use a different color to weave in each continent! Depending on where you live, you might have been taught that there are six continents, not seven. Russia, Eastern Europe and Japan consider Asia and Europe to be one large continent called Eurasia. In France, Italy, Portugal, Spain, Romania, Greece and Latin America, North and South America are considered one big continent referred to simply as America.

Weave travel paths from your school to continents students have visited. Use a different color or material to weave paths to places students want to visit someday.

Practice knots and bows! Pipe cleaners can be wound around the wires but yarn and ribbons might need to be tied in place.

Is your globe hanging outside? Try weaving flowers or grass or leaves through the globe instead of yarn or ribbon!

Add color to your globe! Use rust-proof spray paint to color in the continents or paint the ocean blue. Start by taping paper to the **inside** of the globe to prevent the spray paint from adhering to the opposite side of the globe where you don't want it to show. Next, cut out a mask of the area you want to paint. Place the mask over top of the globe and tape in place. Carefully spray the inside of the mask. Start with light layers of paint and repeat several times. Let dry completely before proceeding to the next continent.



## Globe Math

How far apart are the continents? Is Africa farther away from North America than Europe? Try using a piece of string (or a twig if your F66547 *Wire Weaving World* is outside) to estimate the distances! Once students have measured distances using string or other materials, compare the length of the measuring tool to a ruler. What other items can you use to measure distance?

Which continent is the biggest? What are some strategies you could use to discover the size of the continents without using a ruler? Try using string or yarn to measure the perimeter of a continent. Compare the length of that string to the length of a string wrapped around a different continent. Which is bigger? Does the continent with the largest outline represent the continent with the most land mass? How can you determine the correct answer?

Are the circles of latitude the same size or are they different sizes? How many hand-lengths around are they?

Will your arms go all the way around the globe? How many arm lengths do you need to go all the way around the globe?



## Globe Features Exercise

Form your students in to groups and use different colored materials to identify features of the globe. For instance:

- Wrap one color of ribbon around the whole equator
- Weave in the space between the Tropic of Cancer and the Tropic of Capricorn in a second color.
- Wrap a third color around the Arctic and Antarctic circles.
- Can you find (approximately) the Prime Meridian? Use a fourth color to identify it!



**We would love to hear how you use our products in your classroom. Please email suggestions, ideas, comments, concerns or recommendations to [info@roylco.com](mailto:info@roylco.com)**