

Time Zones

Have you ever wondered what someone on the other side of the world is doing while you are waking up or eating dinner? Understanding the different time zones is really important for people that travel or work with others outside of their respective time zone. This activity will help identify what time it is around the world by creating clocks to represent each time zone.

TEKS:

4.8C Solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate.

5.1A Apply mathematics to problems arising in everyday life, society, and the workplace.

How To:

- 1. Begin by watching this YouTube video to introduce time zones.
- 2. You are going to make 24 clocks, one for each time zone. On each of your circular clock surfaces, mark the 12 hours just as you would see on a clock.
- 3. Cut out 2 arrows for each clock from construction paper or cardstock to represent the hour and the minute hands. You will need a total of 48 clock arrows.
- 4. Use a brad to secure the two arrows to the center of each clock face so that the arrows can move around the clocks easily.

Materials:

- 24 circular flat surfaces for clock faces (e.g. plastic lids off yogurt containers, paper plates, or construction paper)
- Construction paper or cardstock
- 24 metal brads or brass fasteners
- 24 small nails or thumbtacks
- Scissors
- **Sharpies**
- 5. For each clock, label it with a significant place in that time zone and the time difference in relation to where you live. If you live in Texas, Central Time Zone, and you know someone that lives in another time zone, use that person to label the clock. For example: "Grandma's House in New York, +1 hour" or "Grand Canyon in Arizona, -1 hour." You should have 24 clocks labeled for each of the 24 time zones.
- 6. Use a small nail or thumbtack to hang up the clocks at a level where they can be easily adjusted.
- 7. Adjust each clock, accordingly, at various times throughout the day.



The STEM Explanation:

Time zones may be a hard concept to understand, however, relating time zones to everyday life makes it a little easier. Adjusting the clocks at various times throughout the day can bring up several conversations. For instance, if you adjust the clocks during your lunchtime, you can compare and talk about how while you are eating lunch, people in Germany may be eating dinner or getting ready for bed, but in Hawaii they may be eating breakfast or just waking up.

Career Connection:

Air traffic controllers direct aircraft on the ground and through controlled airspace, planning flight schedules for flights across time zones to provide pilots safe takeoff and landing times without interfering with other planes.

Resources:

- https://youtu.be/widWLhIIbzs
- http://playtivities.com/teaching-time-zones-simple-way/

