

# Everyday Math

Math is an important subject that is used everywhere you go. Whether you are using your money to buy something or using a ruler to measure something, math is everywhere you look. In this activity, participants will practice their math skills by completing a set of fun challenges.

## Time Required



20-30 minutes

## Goals and Outcomes

- Understand how math can be fun, easy to practice and can be used everywhere you go.
- Leadership Outcomes
  - Innovate to create positive impact – experiment to find solutions to everyday challenges. Be confident to test her ideas even when it involves taking risks.
  - Seek the information she needs to understand the full picture – Be curious about others and the world.

## What You'll Need

- Lego (Any other small item can work for this activity e.g. buttons, paper clips)
- Challenge List

## Before the Activity

1. Place the Lego in the middle of the room. Make sure you have different colors available as the challenge requires different colors.
2. Print the Challenge List for the participants to use. You may print multiple copies or have them available on a device.
3. Ask participants the following questions to get them thinking about math:
  - Do you like math? Why or why not?
  - Do you think math is useful?
  - Where might you use math at home?

# Everyday Math

## What To Do

- Provide the list of challenges to the participants and let them complete the challenges one by one.
- After each participant completes the challenge, ask participants to reflect on how they may use the challenge in real life. For example, for the challenge where the perimeter is measured, they may have to build something where they need to know how many materials they may need to cover the boundary of an area.
- Repeat step 2 for each challenge on the list.
- If time permits, ask the participants to create their own challenges for each other and solve them together.

## After the Activity

- Ask participants to take down all the towers and put back the blocks in the middle of the room.
- At the end of the activity, as participants are cleaning up materials they may reflect on the following questions:
  - Were these math challenges fun? Easy? Hard?
  - Why might people find math fun? Easy? Hard?
  - Why is math a useful tool and skill to have?
  - Does everyone have to be good at math to learn math?

## Tips and Tricks

- Instead of Lego you can use any small item (e.g. buttons, straws).
- Leaders can try creating their own challenges based on the materials they have at home or challenge the participants to create their own challenges as well.
- Size
  - If there is a big group, the group can be divided into smaller groups, and they can work together to complete the challenge.

# Everyday Math

- Age
  - For younger participants, they can each get their own set of blocks, but they can work together to solve the problem. Facilitators may also consider making the challenges easier for the participants if the math is too difficult.
  - For older participants, they can be challenged to create math problems that are more difficult or complex.
- Online vs In-Person
  - This is an activity that is preferred to be completed in-person.
  - To make this activity virtual, participants can be asked to find something of a large quantity at home (e.g. beans, pencils etc)

## Everyday Math – Modified Challenges

- Create a line the length of the shoe of the 4 people next to you. How long is each shoe and how long is the total?
- Create a line that is 5 items longer than one with  $6 + 9$  items. How many items are in your line?
- Pretend that the blue items are worth 5 cents and green items are 1 cent. How many items would you need to make 57 cents?
- Using the item, build a square, then build another square with sides that are twice as long as the first one.
- Create a line with as many items as the sum of all the ages of the patrol.
- Create a line of 16 items. Make  $\frac{1}{4}$  of the line using green items. How many items are green?