

#### Science Technology Engineering Art & Mathematic Lessons

#### **LEGO SCALE**

**Lesson Goal:** Utilizing special recognition and problem solving to build a Lego scale, then utilizing it to work on measurements and weights.

**Age Group:** 5–8 years old

## **Supplies List:**

- Lego Pieces Required:
  - 12 1 x 6 bricks
  - 6 1 x 4 bricks
  - 4 1 x 2 bricks
  - 1 6 x 12 plate
  - 4 4 x 6 plates
  - 2 1 x 16 Technic bricks
  - 9 2 x 4 bricks
  - 2 2 x 4 plates
  - $\circ$  1 2 x 2 brick with a pin on each side
  - o Items to compare weight (peddles, marbles, feathers, erasers, other small classroom items.

### Steps:

- The first step is to build the scale pans for the balance.
- Place six Lego plates side by side.
- Place Lego Bricks around the perimeter to lock the plates together. (six 1 x 6 bricks, 2 1 x 4 bricks, and 2 1 x 2 bricks)
- Repeat the first steps to make another balance pan.
- Afterwards stack nine 2 x 4 bricks into a tower to create the base of the scale.(a tower of the bricks)
- Put 2 x 2 brick with two pins at the top of your tower.
- Next step is to attach the two 1 x 16 Technic bricks to the pins and place a 2 x 4 plate on each end at the top of balance.
- Now place a 1 x 4 brick beneath the Technic bricks at each end to create an attachment for the balance pans.
- The last step is to attach the pans to the scale using the 1 x 4 bricks
- Utilize your scale to determine weights with measuring weights and objects or just compare small items to each other.



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## References:

https://kidsactivitiesblog.com/115598/lego-balance-scale-stem-project/

**Lesson Plan Provided by:** Cassandra Hernandez