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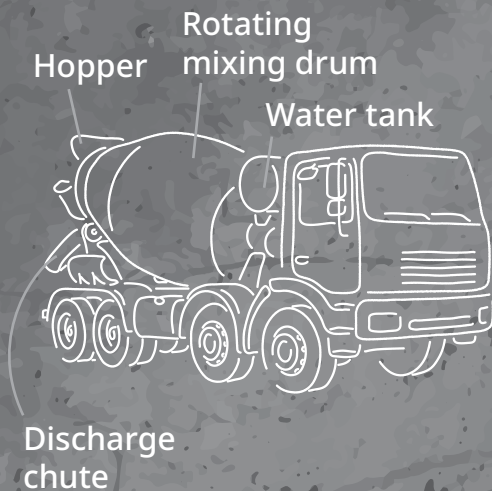
Concrete Slab

Concrete makes a strong, level base to build a station.

Construction workers lay out steel bars to strengthen the concrete, and pipes to hold electrical cables.

Concrete is delivered and poured into the frame and left to harden.

Meet the concrete mixer!



Did you know?

Concrete is made by mixing cement, sand, gravel, and water. Some concrete mixers hold as much as 8 cubic meters of concrete – enough to fill a garbage dumpster!

Let's get ready!

We can use construction paper and popsicle sticks to explore the science behind concrete!

For this experiment, you will need:

- a box of sand or sandbox
- 8 popsicle sticks
- 2 pieces of construction paper
- a rock

Let's get started

Let's see how bars in concrete help make it strong! Lay your paper on the sand and place a rock on it. Does the paper wrinkle? What does this tell you about the paper?

What do you think will happen?

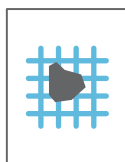
- ➔ What would happen if you put something under the paper?
- ➔ What would help keep the rock from making a dent in the paper?



What is happening?

Now lay out the popsicle sticks in a **tic-tac-toe grid**. On your paper, place four of them vertically, and four of them horizontally. Put the second paper on top of the grid. Now place a rock on it.

- ➔ Does the paper look different from before? How?
- ➔ What happens if you move the popsicle sticks closer together, or further apart?



- ➔ What surprised you?
- ➔ Did anything change your thinking?

This image shows a full page of handwriting practice paper. It contains four identical sets of horizontal lines, each set consisting of a solid top line, a dashed middle line, and a solid bottom line, providing a guide for letter height and placement.

Take a peek through the viewing windows and snap a photo with Digby!

