Sciencenter At-Home: Block Bowling
Build up and then knock down your buildings!

In this activity, learners will build with blocks and then knock their construction down with rolling balls.

Materials:

- Blocks
- Large soft balls like soccer balls or beach balls
- Tape (optional)

Try this:

Have your child to build with the blocks. Build with them or alongside them if they need encouragement. You can ask your child questions like:

- Can you build something taller than yourself?
- How many blocks can you stack one on top of another?

When they’re ready, show them how they can roll the ball to knock down the construction! Have your child roll a ball down a ramp if they need assistance with aim or force.

Discuss the demolition of the building with questions like:

- Did all the blocks fall down?
- What happened when the ball hit the tower?
Repeat the activity! Ask your child to predict what will happen before they knock down the building with questions like:

- Will all the blocks fall?
- Which direction will the blocks go?

If your child is interested, use the tape to mark the distance you would like to roll your ball from. Try experimenting with rolling the ball nearer or farther from the tower.

**Change it up!**

Depending on the age and need of your child, this activity may look different. This is an open-ended and exploratory activity. There is no wrong way to do it!

Here are some activity extensions and adaptations:

- Brainstorm with your child different ways to knock the construction down. Get creative!
- Explore with different kinds of constructions. What are some ways to make the building stronger? Try introducing other materials like tape, playdough, or other kinds of blocks.
- For a younger child, build the structure yourself and have them knock the building down.

**Science process skills**

This activity focuses on building the skills to participate in science over the science content itself. This activity focuses the learners on using skills like problem solving and making predictions as they construct and knock down their buildings.

Making predictions is making educated guesses about certain outcomes. They're built around our own observations and past experiences, so predictions are not just guesses! When guiding children through this activity, remind them of previous experiences of building with blocks to help them make predictions.

Problem-solving is a skill that everyone relies on in their day-to-day life. When building and experimenting, things rarely go perfectly and scientists and engineers need to figure out the problem and how to work around it. Encouraging children to think about new solutions is a great way to grow problem-solving skills. When guiding your child through this activity, ask them to build different kinds of towers. Which is the hardest to knock down?

This activity exists in many versions. This adaptation was inspired by Predictions: Block Bowling from the Collaborative for Early Science Learning copyright 2021, Sciencenter, Ithaca NY. Retrieved from: [http://www.sciencenter.org/perch/resources/predictions-early-head-start-activities.pdf](http://www.sciencenter.org/perch/resources/predictions-early-head-start-activities.pdf)