Science fair projects for kindergarten: count it, don't measure it

Peabody blog · Science · updated 2026-10-31

Ten kindergarten science fair projects where the answer is a count: bounces, blocks, steps, spoonfuls. A grown-up does every wet step, and each has a picture board.

A good kindergarten science fair project asks one question a five-year-old can say out loud, and answers it by counting: how many times a ball bounces, how many blocks a foil boat carries before it sinks, how many heel-to-toe steps a toy car rolls. Peabody now has ten projects written just for kindergarten. Nine cost nothing, eight test in one sitting of an hour or less, and every one comes with a one-page picture board your child finishes with crayons.

Until this week Peabody's projects started at 1st grade, and I told kindergarten families to stretch to a 1st grade one with a grown-up beside them. That was the wrong answer for a five-year-old, so I wrote ten of their own and held them to stricter rules than 1st grade's. Here they are, with what makes them different.

The ten kindergarten projects

- Project: Which ball bounces the most times? · Your child counts: bounces, for a tennis, rubber and foam ball · Testing: 20 minutes · Cost: free
- Project: Does a higher ramp make a toy car roll farther? · Your child counts: heel-to-toe steps, from 1, 2 and 3 books · Testing: 25 minutes · Cost: free
- Project: Which paper goes farthest: a flat sheet, a ball or a plane? · Your child counts: heel-to-toe steps · Testing: 25 minutes · Cost: free
- Project: Does a toy's shadow get bigger when the flashlight comes closer? · Your child counts: crayons laid across the shadow · Testing: 25 minutes · Cost: free
- Project: Sink or float: does a bigger foil boat carry more blocks? · Your child counts: blocks, until the boat sinks · Testing: 30 minutes · Cost: free
- Project: Which soaks up the most: a sponge, a paper towel or a cloth? · Your child counts: spoonfuls, until it drips · Testing: 30 minutes · Cost: free
- Project: Which paper bridge holds the most blocks? · Your child counts: blocks, until it falls · Testing: 30 minutes · Cost: free
- Project: Which ice cube melts first: in the sun, in the shade or inside? · Your child counts: checks every 10 minutes · Testing: about an hour · Cost: free
- Project: When is my shadow longest: morning, lunch or afternoon? · Your child counts: heel-to-toe steps · Testing: 3 sunny days · Cost: free
- Project: Where does grass come up first? · Your child counts: days until it's green · Testing: 10 days · Cost: about $3

The kindergarten page lists all ten first, then the 1st grade projects a kindergartener can stretch to with help. The Top 10 for kindergarten puts the same ten in order, fewest testing days first.

Why nothing is measured with a ruler

A five-year-old can count to twenty but can't read the little lines on a tape measure. So in all ten, the child's own body or a box of crayons is the ruler. The car's distance is heel-to-toe steps. The shadow on the wall is so many crayons wide. The ice cube is how many 10-minute checks it lasted. Every answer is a whole number your child says out loud, and that's the point: the counting is the science, and it's theirs.

Each project has three things to try (never more than four), three tries at each, and at most eight steps, all of which can be read aloud.

Stricter than 1st grade, in code

Every project on Peabody passes a check in the code before a child can see it. The kindergarten ones pass every 1st grade check and then a stricter set on top:

- A grown-up does every step with water or ice. If a step mentions water, ice, pouring or a tub, the check refuses it unless it's marked as the grown-up's step. In the foil boat, the grown-up fills the tub and floats the boat; the child counts the blocks.
- No balloons at all, not even blown up by a grown-up. The US Consumer Product Safety Commission's balloon safety alert (Pub. 5087, read 31 October 2026) says children under eight can choke or suffocate on uninflated or broken balloons.
- Nothing marked small parts. No pennies, marbles or dried beans. The foil boat and the paper bridge use about twenty small wooden blocks instead.
- Nothing that isn't safe to touch: no dish soap, no shaving foam.
- No knife, skewer or anything that plugs in, even in a grown-up's hands.
- A bar graph only, made by colouring a box for each count.

Little brothers and sisters are in the room for a lot of kindergarten projects, and that's who several of these rules are for. The CPSC's own small-parts guidance (read 31 October 2026) is written for toys for children under three.

The picture board

A kindergarten board isn't a tri-fold of six sections. It's one page. Every kindergarten project prints its own picture board: the question with its picture, "I think…" with a box to tick for each thing tried, a box to draw the test, a stack of boxes to colour for each count (that stack is the graph), and "I found out" for what your child says. There's no name line on it. Glue it to a folded card or the middle of a tri-fold. If your fair wants the full six-part board, the board plan has it, and a grown-up can write the words while the child does the drawing.

How to run one with a five-year-old

1. Ask for the guess first. "Which ball do you think will bounce the most?" Have them tick a box on the picture board. That tick is the hypothesis.
2. Read each step aloud. Every step has a speaker button if you'd rather Peabody read it.
3. Let them count, out loud. You write the number down.
4. Three tries each, if they're still keen. If they flag after one, stop: a first fair is about the habit, not the table.
5. Colour the boxes together. The tallest stack answers the question.
6. Ask what they found out, and write their exact words.

Try tonight

Find a tennis ball, a rubber ball and a foam ball, and stand on a hard floor. Your child holds the tennis ball up as high as their nose and lets go (opening the hand, never throwing) and counts every bounce out loud until it rolls. Write the number, do it twice more, then do the same with the other two balls. That's Which ball bounces the most times?, done in twenty minutes. For the bigger picture, how to help with a science fair project covers how much a grown-up should do at each age.

Questions grown-ups ask

Does a kindergartener need a hypothesis?

Yes, but it's just a guess said before the test. "The rubber ball, because it's bouncy" is a perfect kindergarten hypothesis. The picture board has a box to tick for it.

How much should I do?

At this age you hold the pencil, read the steps and do anything with water or ice. Your child guesses, counts and tells you what happened. Judges at elementary fairs look for the child's own words, so write down what they say, not what you would say.

What if my child's school has no kindergarten section?

Ask the teacher what kindergarten does on fair day; a project and a picture board are ready either way. The 1st grade post has six more that fit a kindergartener with a grown-up beside them.

Peabody (peabody.kids) is free through the end of 2026, with no ads and no sign-up, and nothing a child taps on the science fair pages is sent anywhere. The library has first books for five-year-olds, for after the blocks are put away.

Free at peabody.kids/blog/science-fair-projects-for-kindergarten