10

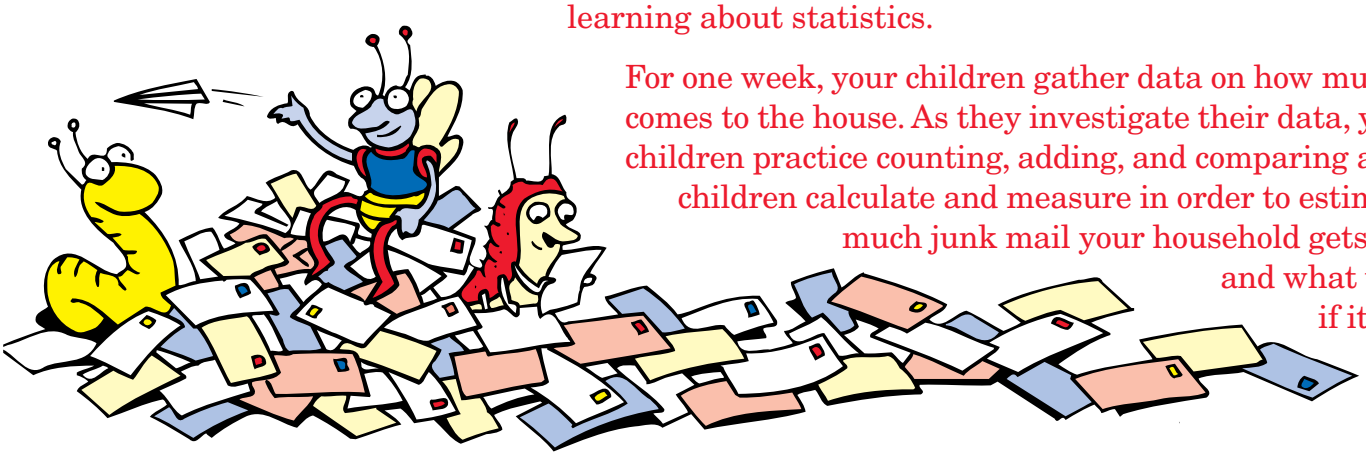
Junk mail (a mini project)

Materials

Your daily mail

"Lots of ads in the mail again—what a waste of paper! I wonder how much of this junk mail we get in a week? How much do we get in a whole year?"

Many children are interested in recycling and saving resources. In this activity, children investigate paper use (and paper waste) while learning about statistics.



For one week, your children gather data on how much junk mail comes to the house. As they investigate their data, younger children practice counting, adding, and comparing amounts. Older children calculate and measure in order to estimate just how much junk mail your household gets in a year—and what would happen if it all piled up!

Before you begin

Set the stage for the project by sorting today's mail and talking about junk mail.

"Let's sort today's mail. We'll put regular mail in one pile, junk mail in another. How much mail do you think we throw out every week without even reading it?"

Encourage your children to make some predictions.

Decide with your children what will count as junk mail: Will you count catalogs? Sweepstakes announcements? Coupons? Other advertisements? You may not be able to make all your decisions in advance, but it's important that everyone generally agrees what to count as "junk."

1. Count and keep track

Every day for a week, your children help sort the mail into two piles: junk mail and regular mail. After counting the number of pieces in each pile, they record the date, how much regular mail, how much junk mail, and the day's total. When they're done, they add the junk mail to the junk mail pile for the week.

Your children can record their data with a chart, graph, tally, or some other way. They can use something they learned in school, or they can come up with their own ways. With young children, it's fine for you to help with recording.

2. Investigate the data

Throughout the week, ask questions about the data your children are collecting. As the week goes on and the totals get larger, younger children may need help finding some of their answers.

"Is there more junk mail or regular mail today? How much more?"

"How much junk mail did we get so far this week? Did we get more junk mail or regular mail so far?"

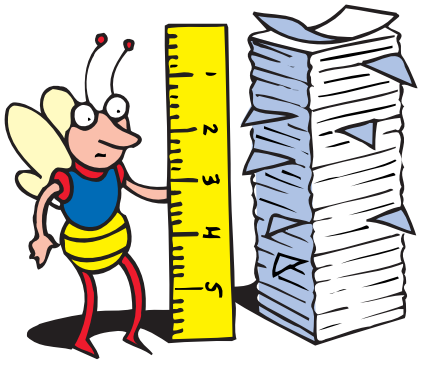
"How many pieces of mail did we get in all today? How many so far this week?"

Additional challenges for ages 7–11

"If we get the same amount of junk mail each week, how much will we have in a month? A year?"

"What fraction of the mail is junk mail? Is it more than half?"

Age range 5–11



"Measure the height of the pile of junk mail at the end of the week. If we let it stack up, how high would our pile of junk mail be in a month? In a year? Would the pile be taller than you are? Up to the ceiling? Taller than the building we live in?"

"If every house on our block (or every apartment in our building) got the same amount of junk mail as we did this week, how high would the pile of junk mail be?"

When you repeat this activity

Save the data you collected this week, then repeat the activity, perhaps at a different time of year. Compare your data.

"Do we get more junk mail during holiday seasons? At the start of the school year? Do we get more on certain days of the week? Why do you think so?"

Variations

More kinds of mail (ages 5–11)

Each day, sort the mail into several categories. You could try one of these ways:

- Name it's addressed to (family member, "occupant" or "resident," former residents of your home)
- Where it's from (country, state, or region of the U.S.)
- Type of mail (bills, letters, magazines, junk mail)

Keep track of how many pieces you get in each category for a week. Then investigate your data.

"Who gets the most mail in the house?"

"About how far away does most of our mail come from—less than 50 miles away? Between 50 and 100? Between 100 and 1000? Over 1000 miles away?"

"Besides junk mail, what's the most common kind of mail we get? What percent of the total mail is this?"