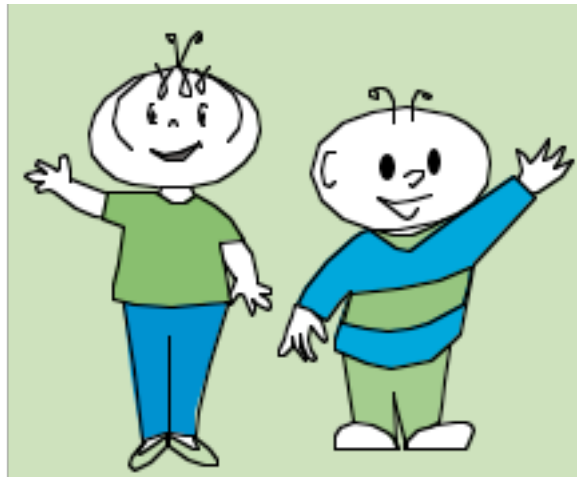


# Stop Pulling Teeth: How to extract students' mathematical thinking

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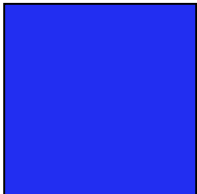
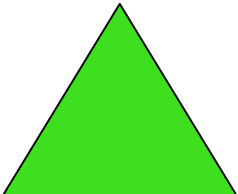
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## Headline Stories: An Example



Jane bought a birthday card.  
She gave the cashier \$3  
and received 3 coins as change.

From the classroom...

 $+$  $=$  10

Consider what each response tells you about students' thinking and understanding.

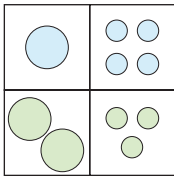
## Headline Stories – More Examples

- I rolled two number cubes and got a total of 8.
- Terry had 10 pet mice in a cage. Some were asleep. Make a table showing possible situations.
- Rachel showed the number “seven” by holding up 7 fingers. How many fingers might have been up on her right hand?
- There were more than 10 newts in the pond. Some were sleeping, but 6 were awake.
- Eleanor had 1 hour to both do her homework and play outside. If she did her homework for \_\_\_ minutes she could play outside for \_\_\_ minutes.

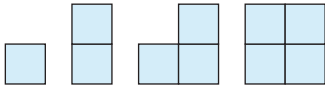
- Tell a story about this picture:



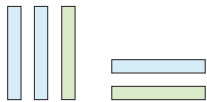
- Suggest a mathematical sentence about this picture and explain it:



- Tell a story suggested by this picture:



- Write a fact family and tell a story about this picture:



- Complete and make stories to go with  $\triangle \times \square = 12$ .
- Debbie reached into a jar containing only dimes and nickels and pulled out 4 coins. It is possible that.... It is impossible that...
- Laura and Cory both left home with the same amount of money. At the school store, Laura bought an eraser for 5¢, and Cory bought a pencil for 10¢.
- Devon had \_\_\_ dimes and \_\_\_ pennies. Make a chart showing possible numbers of dimes, pennies, and the total amount of money for each possibility.

## Headline Stories – More Examples

- George had \$26 on Monday. He spent \$2 on Monday and \$2 each day after that.
- Cookie sale! The first cookie you buy costs 5¢. Every cookie after that costs 3¢.
- Cookies again! Today cookies cost 4¢ each. I have a dime and a quarter.
- Sweatshirts cost three times as much as T-shirts.
- Sam bought a present for his sister Lucy. The cashier gave him the following change: a quarter, a dime, a nickel, and a penny.
- Bettina arranged her pennies into a square.
- There are 12 bananas. \_\_\_ monkeys can each have \_\_\_ bananas, if they share fairly.
- A town has 2 roads that go North and South, and 5 East-West roads that cross them.
- A group of children ate 24 nuts. They all ate the same number of nuts.
- The school auditorium has 20 rows of seats with 21 seats in each row. There are 345 students in the school.
- Saul has 30 building blocks. He grouped them by threes and said that one out of every 3 blocks is green.
- Charles cut his rectangular birthday cake into equal pieces to share with his 8 friends.
- I start at 2 on the number line and make jumps of 3 spaces to the right. List some of my landing points, and write some of the number sentences my jumps represent.
- Susan took half as long to eat her lunch as Paul. (Optional extension: They started lunch together, but Susan finished at 12:10, and Paul finished at 12:17.)
- The temperature dropped 8 degrees in the last hour. Make a chart of some possible temperatures for an hour ago and for now.
- Six squares are arranged so each shared a side with at least one other square. An ant crawls all the way around the edge of this shape.
- Caroline walked around a track several times. Each lap took her 5 minutes. The track was a quarter of a mile long.
- In 1992 a tree was 60 years old.
- Today is \_\_. My birthday is in \_\_ months, \_\_ weeks, and \_\_ days.
- Dante found a list of numbers, but he couldn't read all of the entries. This is what he could read: 1, 2, 4, 5, \_\_, 8, 10, 11, \_\_, \_\_, \_\_, \_\_.

## Thank you!

We hope you try out **Headline Stories** in your classroom!

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