



# Third Grade Math

Week of April 27, 2020  
[knoxschools.org/kcsathome](https://knoxschools.org/kcsathome)

Read this problem that involves using different operations to solve it. Then look at Sweet T's solution to this problem.

## Sweet T's Tees

Sweet T wants to buy shirts for his fingerboard team. The team will have between 8 and 10 members. Everyone should get two different shirts.

- \$50 set-up fee to print
- Add \$2 to the cost of each shirt to print on it.



Sweet T can spend up to \$225 for shirts. It's okay to have money left over.

- Tell what kind of shirts and how many to order.
- Decide whether or not to print on the shirts.
- Give the total cost and amount of money left over.

Look at Sweet T's Solution on the right to see how he did it. Can you do it a different way?

### Sweet T's Solution

Hi, I'm Sweet T. Here's how I solved this problem.

▶ **I know that there will be 8 to 10 team members.**  
I will plan on buying for 9 members. I don't want to have too many extra shirts.

▶ **I can make a table to show the costs for different kinds of shirts.**  
Multiply the price of the shirt by the number to buy.

Type of Shirt	Plain	With Print
Short Sleeve	$9 \times \$6 = \$54$	$9 \times \$8 = \$72$
Collar	$9 \times \$7 = \$63$	$9 \times \$9 = \$81$
Long Sleeve	$9 \times \$8 = \$72$	$9 \times \$10 = \$90$

The table helps me see all of the choices.

▶ **I can find the cost for the two most expensive shirts.**  
Cost of shirts:  $\$81 + \$90 = \$171$   
Add set-up fee:  $\$171 + \$50 = \$221$   
I think this is too close to \$225.

▶ **I'll buy . . .**

collar shirts with print:	\$ 81
plain short-sleeve shirts:	\$ 54
set-up fee:	+ \$ 50
<b>total:</b>	<b>\$185</b>

I could buy the most expensive shirts. I would rather have money to buy other things.

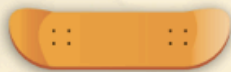
▶ **I can subtract to find the amount left over.**  
 $\$225 - \$185 = \$40$   
There will be \$40 left over after buying the shirts.

This plan gives the team two different looking shirts.

Read the problem. Write a solution on a separate sheet of paper. Remember, there can be lots of ways to solve a problem!

## Fingerboard Parts

Sweet T wants to have lots of extra fingerboard parts. He wants members to be able to mix and match parts to make different boards.



### Decks

\$8 each

Available in yellow, red, pink, purple, orange, and green.



### Trucks

\$6 for a set of 2

Available in pink, red, blue, black, and white.



### Wheels

\$7 for a set of 4

Available in yellow, red, blue, black, and white.

Put the parts together to make your own board!



Sweet T can spend up to \$160 on fingerboard parts. What should he buy?

**Plan It and Solve It** Find a solution for the Fingerboard Parts problem.

- Make a list of the parts to buy. Include the numbers of the different parts and the colors.
- Tell why you chose the parts that you did.
- Find the total cost to buy the parts. Tell how much money is left. You may want to use the problem-solving tips to get started.

## Reflect

**Use Mathematical Practices** As you work through the problem, discuss these questions with a partner.

- **Use Models** How can you use equations to help find a solution?
- **Persevere** How can you check that your solution makes sense?

Read the problem. Write a solution on a separate sheet of paper. Remember, there are many different ways to solve a problem!

## Skate Park

Sweet T has \$80 left after buying items for the team. He wants to buy at least three different items for the skate park he is making. Here are the items Sweet T is looking at.



Table \$24



Bench \$15



L-Shaped Box \$15



Box \$18



Palette \$10



Rail \$22

What items should Sweet T buy?

**Solve It** Tell which items Sweet T should buy.

- Give the total cost.
- Explain why you chose the items you did.

## Reflect

**Use Mathematical Practices** After you complete the task, choose one of these questions to discuss with a partner.

- **Persevere** What steps did you take to get your solution?
- **Use a Model** Which operations did you use to solve the problem?

## Grip Tape

Sweet T wants to buy pieces of grip tape for the team. The tape sticks to the deck of the fingerboard to make it less slippery. Sweet T thinks that each of the 9 members of his team needs at least 4 pieces of grip tape.

### Grip Tape

1 piece for \$1

OR

Buy 5 and get 1 piece free.



How many pieces of grip tape should Sweet T buy?

**Solve It** Decide how many pieces of grip tape Sweet T should buy for each team member.

- Tell why you chose this number.
- Tell the total number of pieces needed.
- Find a way to buy groups of 5 or separate pieces to get this total.
- Give the total cost.

## Reflect

**Use Mathematical Practices** After you complete the task, choose one of these questions to discuss with a partner.

- **Make an Argument** What reasons did you have for your decision about the number of pieces to buy?
- **Persevere** What was your first step in finding a solution? Why did you start this way?

## Possible Solutions

Remember there can be many different ways to solve a problem!

### Sweet T's Tees

Sweet T needs to buy 2 shirts for 8 to 10 team members. The prices are given. Sweet T has up to \$225 to spend, but wants to keep some money to spend on other things.

Sweet T should buy for 10 team members to be sure he has enough shirts.

Sweet T could buy the least expensive shirts with no printing. Then there is no set-up fee. The short sleeve T shirts cost \$6 each and the collar shirts cost \$7 each.

So for each person, the two shirts cost \$13.  
 $\$13 \times 10 = \$130$ .  $\$225 - \$130 = \$95$   
so I have \$95 left over.

### Skate board Park

I need to choose what Sweet T should buy and tell what it costs. Sweet T has \$80 to spend. I need to explain to buy those pieces.

Sweet T should buy as many different items as he can, to make the skate park more interesting.

If he buy 1 of everything, that costs  $\$24 + \$15 + \$15 + \$18 + \$10 + \$22 = \$104$  and that's more than he has. So take out the palette (\$10). Now the total cost is  $\$104 - \$10 = \$94$ . Still too much. So take out the bench (\$15). Now the total cost is  $\$94 - \$15 = \$79$ , which leaves \$1. But this only gets 4 items for the skate park which doesn't seem interesting enough.

Instead, buy one of each item except the table. That will cost  $\$15 + \$15 + \$18 + \$10 + \$22 = \$80$ . This uses up all the money and gets 5 different items for the skate park.

### Fingerboard Parts

I need to list how many of each part to buy, the cost, and how much money is left over. I need to explain why I chose these parts.

I want to buy as many wheels as I can because switching wheels makes a big change in the board very quickly.

10 sets of wheels cost  $10 \times \$7 = \$70$ . 5 sets of wheels cost  $5 \times \$7 = \$35$ . So 15 sets of wheels cost  $\$70 + \$35 = \$105$ . That leaves  $\$160 - \$105 = \$55$  for buying decks and trucks. 3 decks cost  $3 \times \$8 = \$24$ . 3 trucks cost  $3 \times \$6 = \$18$ . Together, that's  $\$18 + \$24 = \$42$ . I spent  $\$105 + \$42 = \$147$ . I have  $\$160 - \$147 = \$13$  left. I chose colors I like. I got equal amounts of all wheel colors.

Here is my shopping list.

Wheels: 3 yellow, 3 red, 3 blue, 3 black, 3 white = 15 sets. Cost = \$105.

Decks: 1 yellow, 1 purple, 1 green = 3 decks. Cost = \$24.

Trucks: 1 blue, 1 black, 1 white = 3 trucks. Cost = \$18.

Total cost =  $105 + 24 + 18 = \$147$ .

### Grip Tape

I need to decide how many pieces of grip tape Sweet T should buy so each team member gets at least 4 pieces. I think the team members should get 6 pieces each. That's  $9 \times 6 = 54$  pieces. That's \$54 buying single pieces. But buying in groups of 5, gets 1 piece free. I will make a table.

Money spent	Number of pieces	How many groups of 5	Free pieces	Total pieces
\$5	5	1	1	$5 + 1 = 6$
\$10	10	2	2	$10 + 2 = 12$
\$15	15	3	3	$15 + 3 = 18$
\$20	20	4	4	$20 + 4 = 24$
\$25	25	5	5	$25 + 5 = 30$
\$30	30	6	6	$30 + 6 = 36$
\$35	35	7	7	$35 + 7 = 42$
\$40	40	8	8	$40 + 8 = 48$
\$45	45	9	9	$45 + 9 = 54$

So, for \$45 and Sweet T get 45 pieces of grip tape plus 9 free pieces, which is 54 pieces. That gives everyone 6 pieces of grip tape and saves \$9.



# Third Grade Social Studies

### PLAN A ROAD TRIP

You will be persuading your parents to take you on a road trip to five different states. Along the trip you will encounter different land features, water features, and man made features such as tunnels and bridges. Keep the writing rubric in mind while writing.

1. First you need to convince your parents to take you on this trip. Why do you want to go? Why should you go? What will you learn? (Hint: This will be your topic sentence.)
2. Explain where you will start and what states you will be visiting. (Remember: You normally start in the state you live in. You will want to use a map to help you figure out the order in which you should go to each state. Use your cardinal directions. Example: We will begin in Tennessee and travel South toward Chattanooga.)
3. Talk about the different geographical features you will see and how you will overcome these features. (Hint: Will you use bridges, tunnels, canals? Geographical features are things such as lakes, rivers, and mountains.)
4. Wrap up your writing. (Hint: This is your closing sentence. You can use your topic sentence again. This is the last thing your parents will be reading and you want to convince them to take you on this trip.)



# Third Grade

## ELA



**There will be a short video lesson of a Knox County 3<sup>rd</sup> Grade Teacher to accompany this text available on the KCS YouTube Channel and KCS TV.**

Tennessee's English Language Arts (ELA) standards ask students to read, talk, and write about a variety of texts. In this activity packet, your child will have the chance to do just that as they work to solve a mystery.

If your child completed last week's activity packet introducing them to the text and tasks, this week's activities will allow them to review their prior learning and to extend their understanding of this topic. If your child did not complete last week's activity packet, this week's activities will allow them to read, talk, and write in response to a text, as well as compare their work to an exemplar.

**1) Check for understanding of the Essential Question for the unit:**

*What makes nature's record-holders unique?*

Questions for Discussion:

What does unique mean?

How is Mt. Waialeale unique?

**2) Reread the student's response to text and check for the following:**

- Topic sentence
- Important Details
- Ending

*Does their writing make sense? Does their response answer the question?*

**3) Option to extend:**

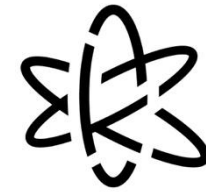
- Ask students to choose three colors and highlight their topic sentence, important details, and ending. Do they have everything that they need in their writing?
- Pick a unique location to write about. (This could even be your school!) Write a paragraph about your unique location. Remember to include details to support why this is a unique location. Add pictures or drawings to support your writing.



# Third Grade Science

# 3<sup>rd</sup> Grade Science: Week 4 April 27






## Types of Clouds



**Directions: If you have internet access, watch the KCS@Home video before doing this handout.**

A cloud is a collection of tiny water droplets or ice crystals in the air. The color and shape of clouds can give information about the weather. Clouds can appear white or gray. White clouds are made of water droplets that scatter light. When clouds get thicker and taller, they reflect more sunlight. That's when clouds appear gray. Gray clouds often bring rain.

Cloud types are named for their shape. Those formed in layers covering the sky are called *stratus* clouds. Those that are puffy and rise high up in the air are called *cumulus* clouds. Very high white, wispy-shaped clouds are named *cirrus*. Some stratus and cumulus clouds can be dark gray and produce rain or snow. These rain or snow clouds have the term nimbus added their name. They are called *nimbostratus* or *cumulonimbus* clouds because nimbus means “gray rain cloud.”

Cloud	Picture and Associated Weather	
<p><b>STRATUS</b> -light gray blanket</p>	light rain or snow depending on temperature	
<p><b>NIMBOSTRATUS</b> -dark gray blanket</p>	steady rain or snow depending on temperature, lasts for hours	
<p><b>CUMULUS</b> -flat base -fluffy, cotton-like</p>	fair weather (partly sunny, light breeze)	
<p><b>CUMULONIMBUS</b> -begin as cumulus -tall, anvil shape</p>	thunderstorms, heavy rain, snow, hail, lightning, sometimes tornadoes	
<p><b>CIRRUS</b> -most common high cloud -made of ice -white, thin, wispy</p>	fair to pleasant weather	

## Types of Clouds

**DIRECTIONS:** Observe the clouds and the weather for a week. What kinds of clouds can you identify? What weather comes with those clouds? Does the weather you experience go with the types of clouds you see? Record your observations below.

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Cloud Type							
Drawing of Clouds You See							
Weather							
Other Observations							

### Extension Activity:

Create your own clouds with materials you find at home! Can you use cotton balls, tissues, or other items to create your own 3-dimensional models of all 5 types of clouds? Can you use crayons, paint, or markers to draw 2 dimensional models?



Having fun watching the clouds? Share a picture with us by tweeting to @KCSScience