# Thome Connections Math Activities 

## Grade 6

Number Sense and Numeration

2 For... 3 For...<br>Finding Travel Times<br>Fractions and Percents in Ads<br>Lessen the Load

## 2 For... 3 For...

1. Look through a grocery store flyer with your child and find examples of food that are sold as "2 for...," "3 for...," "6 for...," and so on.
2. Select an item and have your child use a calculator to find the cost of multiple items. For example, if the price of tomato soup is 3 cans for $\$ 1.39$, you might use a table to record the price of $3,6,9,12$, and 15 cans. (See attached chart)
3. Next select a different item with your child. Without your child watching, use a calculator to determine the cost of several of the items. Tell your child the cost of several items, and have him or her estimate the number of items. For example, if containers of yogurt are 2 for $\$ 4.89$, you might calculate the cost of 12 containers, and ask: "How many containers could I buy for $\$ 29.34$ ?" Have your child use a calculator to check his or her estimate.

3 for $\$ 1.39$
2 for $\$ 4.89$


| Cans | 3 | 6 | 9 | 12 | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Price | $\$ 1.39$ | $\$ 2.78$ | $\$ 4.17$ | $\$ 5.56$ | $\$ 6.95$ |



Why do you think grocery stores sell items in quantities? How do you find the best deal?

## Finding Travel Times

Have your child solve the following problem in a way that makes sense to him or her.

1. The distance from Barrie to Thunder Bay is 1275 km . How long would it take to travel this distance by car if you travel at an average speed of 85 km per hour?
2. Determine the approximate time it would take to travel by car between two cities of your choice.


## Let's Talk About It

How was your strategy the same or different in answering the two questions?
If you were taking the trip what else would you take into consideration that might change the amount of time it would take to arrive at your destination?

## Fractions and Percents in Ads

1. With your child, find 6 ads that use fractions or percents to advertise the sale of an item.
2. Ask your child to explain the discount described by the fraction or percent.


## Let's Talk About It

Which ad has the greatest savings? How do you know?
What would you pay for an item that is regularly $\$ 28$, if it is half price?
How could you figure out, in your head, what you would save if an item that regularly costs $\$ 35$ is discounted by $10 \%$ ?

## Lessen the Load

Studies have shown that students should carry no more than 15 percent of their body weight or mass (about 5 kilograms for most grade 6 students) to prevent injury to back, neck, and shoulders.

1. Have your child find the total mass of the items in the backpack. See attached chart.
2. Have your child determine what the body weight of the grade 6 student can be for the mass of the backpack to be ok.


## Let's Talk About It

Is your backpack over or under 15 percent of your body weight? How do you know?

## Lessen the Load

| Backpack Item | Mass |
| :--- | :---: |
| math textbook | 1.395 kg |
| binder | 0.764 kg |
| workbook | 0.102 kg |
| agenda | 0.245 kg |
| paperback novel | 0.140 kg |
| pencil | 0.005 kg |
| calculator | 0.075 kg |
| gym clothes | 0.485 kg |
| shoes | 0.598 kg |
| lunch | 0.582 kg |
| pencil case contents | 0.302 kg |
| geometry set | 0.109 kg |

