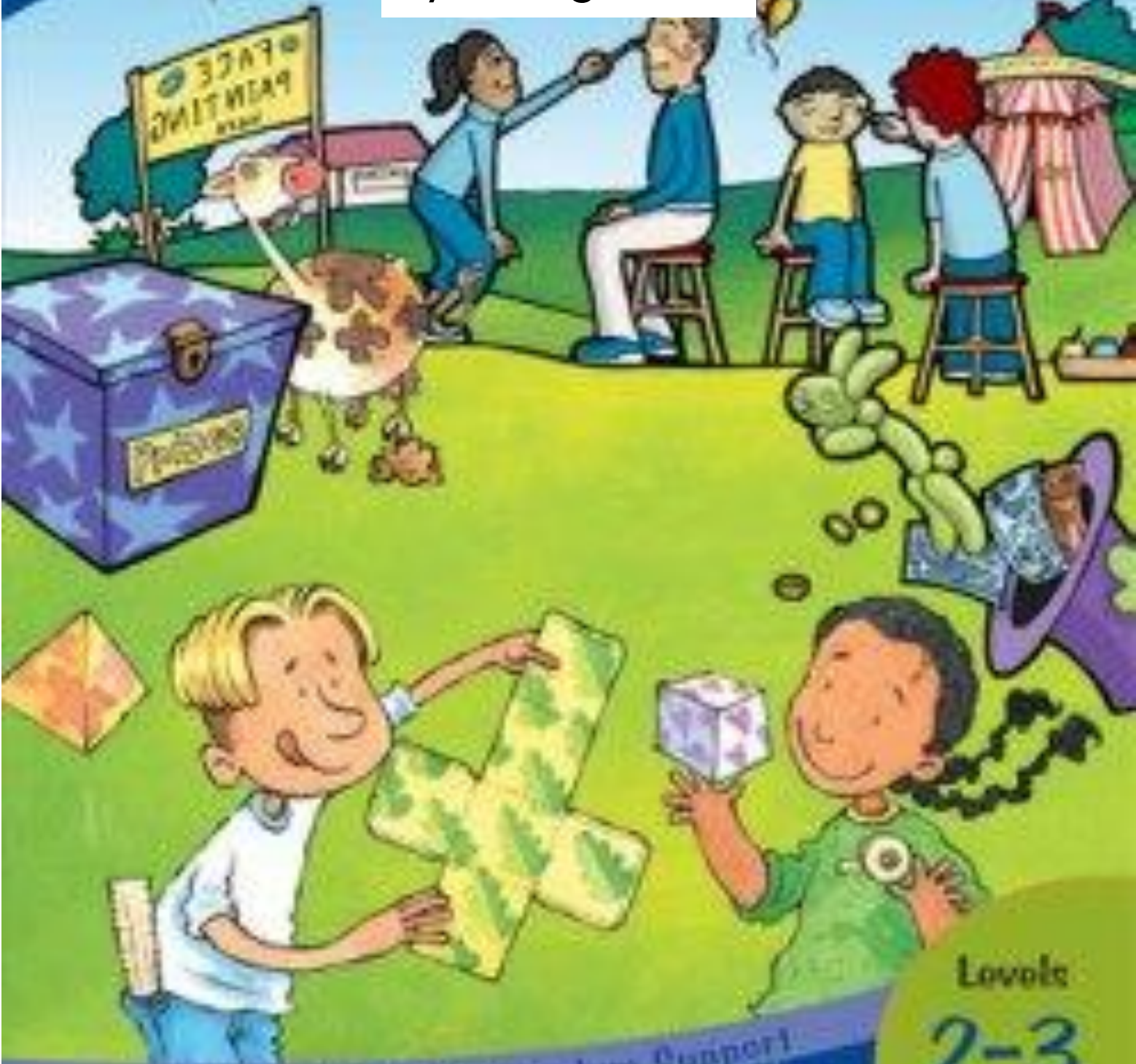


Figure It Out

Gala

By Vaingalo



Levels

2-3

Date Dilemma

You need a classmate



Activity

The students, parents, and teachers at Te Rata School are having a gala to raise money for their school. They have to decide which Saturday in November to have it.

Discuss with a classmate which date suits most people and why that date is best.



There is a parade through town on the first Saturday of the month.

Three teachers are going to a wedding on the second Saturday.



There are usually strong winds in the last 2 weeks of November.



Room 4's teacher is going to hospital for a week on 3 November.

Rooms 6 and 7 are on camp from 14 to 18 November.



Te Rata is hosting a big vintage car rally from 14 to 18 November.

Rooms 2 and 3 have kapa haka practice on the third and fifth Saturdays.



Date Dilemma

What date suits most people? Why?

We think because that's when that wind come in and when it hits 29 its gonna get stronger

Holding a Vote

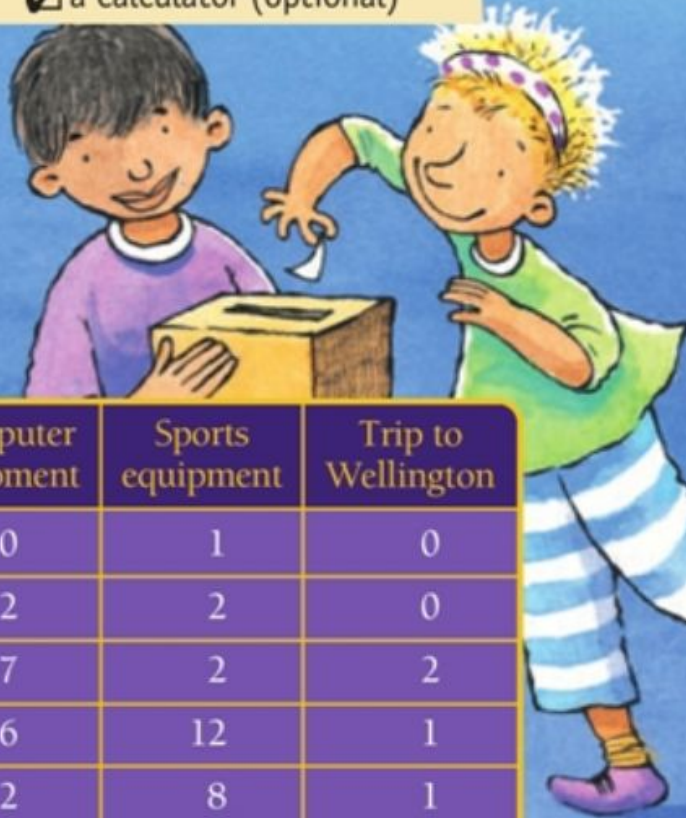
You need classmates

a calculator (optional)

Activity

The school needs to decide what to do with the money that they raise at the gala. The students have a vote.

Here are the results.



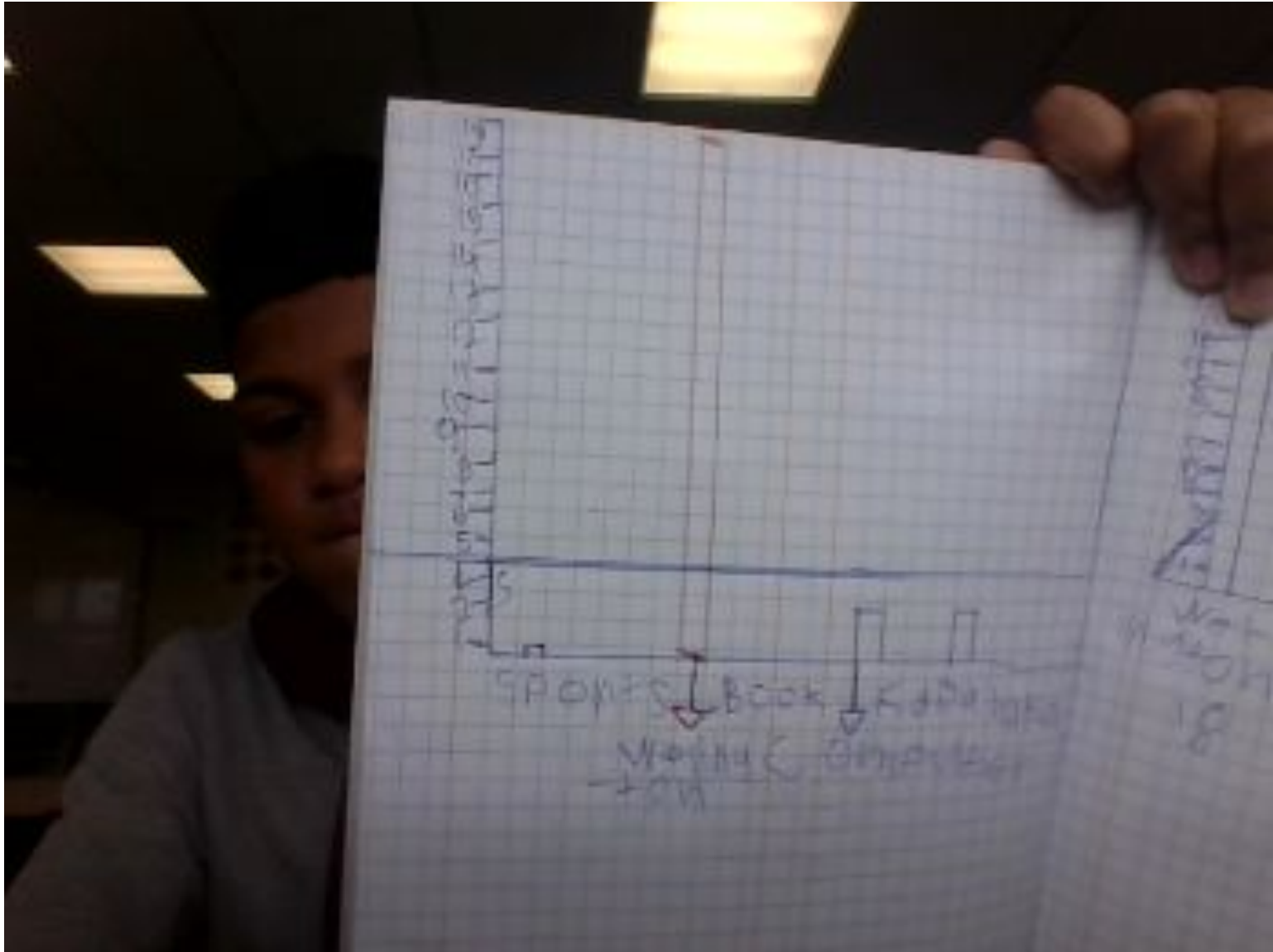
	Books for the library	Kapa haka costumes	Computer equipment	Sports equipment	Trip to Wellington
Room 1	10	6	0	1	0
Room 2	7	13	2	2	0
Room 3	7	7	7	2	2
Room 4	7	4	6	12	1
Room 5	2	5	12	8	1
Room 6	3	1	2	2	14
Room 7	1	0	2	4	15
Room 8	11	9	1	4	2
Room 9	5	5	7	4	3
Totals	53	50	39	39	38

1.
 - a. Find the total number of votes for each choice.
 - b. What is the most popular choice?
 - c. What is the least popular choice?
2. Why do you think Rooms 6 and 7 voted the way they did?
3.
 - a. With your classmates, vote for the choices above.
 - b. Add your class's votes to the Te Rata School votes. Does this change what the most popular choice is?

Holding a vote

1.
 - a. Find the total number of votes for each choice (fill in the [table](#))
 - b. What is the most popular choice?
 - c. What is the least popular choice?
2. Why do you think room 6 and 7 voted the way they did?
3. Trip to willington 18
 - a. With your classmates, vote for the choices above.
 - b. Add your classmates votes to the [Te Rata school votes](#). Does it change what the most popular choice is?

Holding a vote graph



How Many People?

You need a classmate

a calculator

The principal thinks that 1 000 people will come to the gala.

I wonder which activities will be the most popular?

Activity

1. Here are the ideas that some of the students had. How many people do they think will visit each activity?

a. ROOM 5

We think one-quarter of the people at the gala will have a ride on the merry-go-round.

c. ROOM 7

About half the people will play Throw the Gumboot.

e. ROOM 9

Lots of people get hungry at a gala. Three-quarters of the people will visit the food stall.

b. ROOM 6

One-fifth of the people will go to the ball-throwing stall.

d. ROOM 8

Children like having their faces painted. About half the people at the gala will be children, and about half the children will have their faces painted.

How many people?

1. Look at the ideas some of the students had. How many people do they think visit each activity?
 - A. Room 9 (Stan Food)
 - B. Room 7 (GumBoots)
 - C. Room 8 (Face Painted)
 - D. Room 6 (Throwing Balls in the hall way)
 - E. Room 5 (Riding the merry)

2. Write down **two** of your own ideas for the gala and estimate what fraction of the people will go to those activities. Ask a classmate to work out how many that will be.

Idea 1

Idea 2

Terrific Treats



You need a classmate a calculator
 the ingredients and equipment for lemon cordial

Activity One

Room 2 are making fudge. They are using Mikala's mother's recipe. Here are the ingredients:

2 tablespoons golden syrup

100 grams butter

$1\frac{1}{2}$ cups packed brown sugar

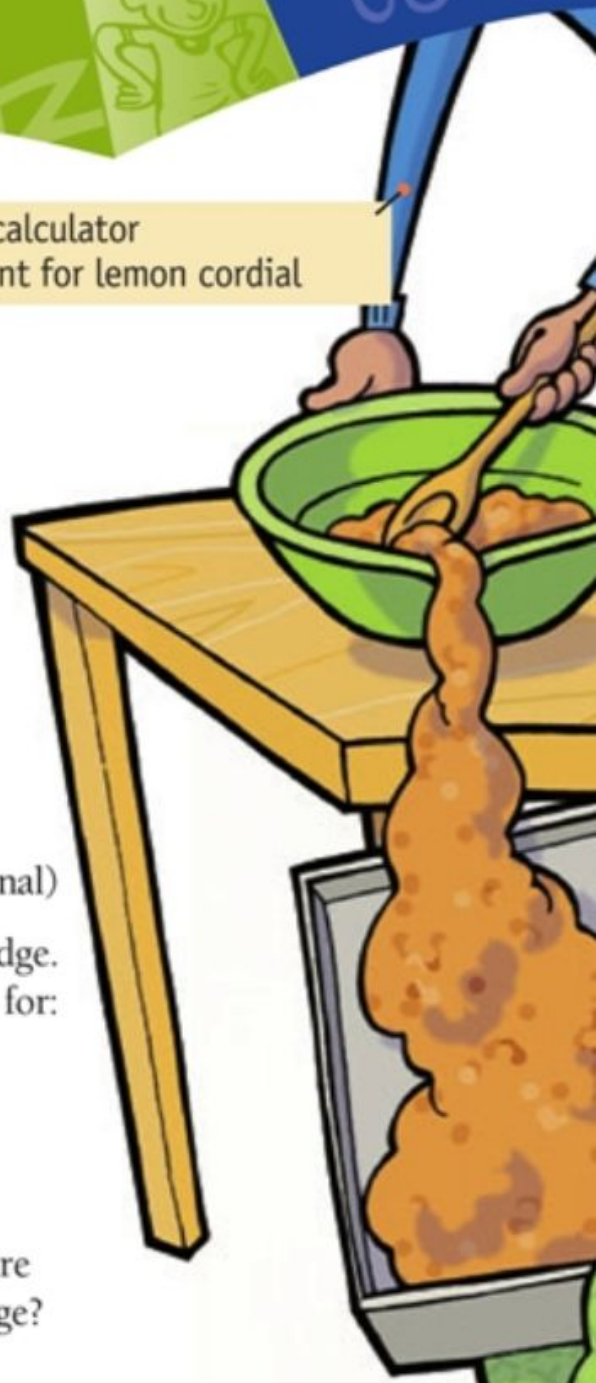
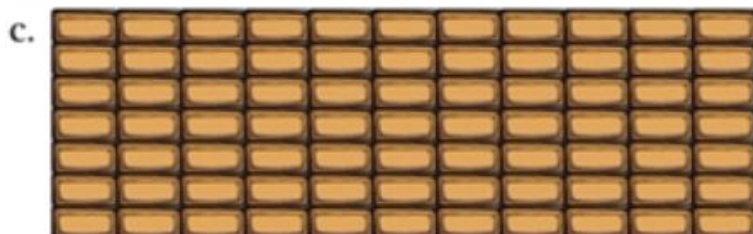
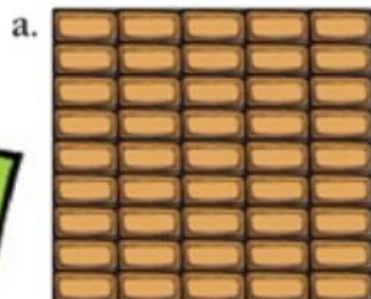
1 can sweetened condensed milk

1 teaspoon vanilla essence

75 grams dark chocolate

$1\frac{1}{2}$ cups chopped nuts, coconut, or dried fruit (optional)

- This recipe is enough for about six boxes of fudge. How much of each ingredient would you need for:
 - 12 boxes?
 - 120 boxes?
- The fudge in these tins has been cut up. Can you work out how many pieces of fudge are in each tin without counting each piece of fudge?



Terrific treats

1. This recipe is enough for about 6 boxes of fudge. How much of each ingredient would you need for :
 - a. 12 boxes
 - b. 120 boxes

2. Can you work out how many pieces of fudge are in each tin without counting each piece of fudge?
 - a. 50
 - b. 28
 - c. 77

Making Boxes

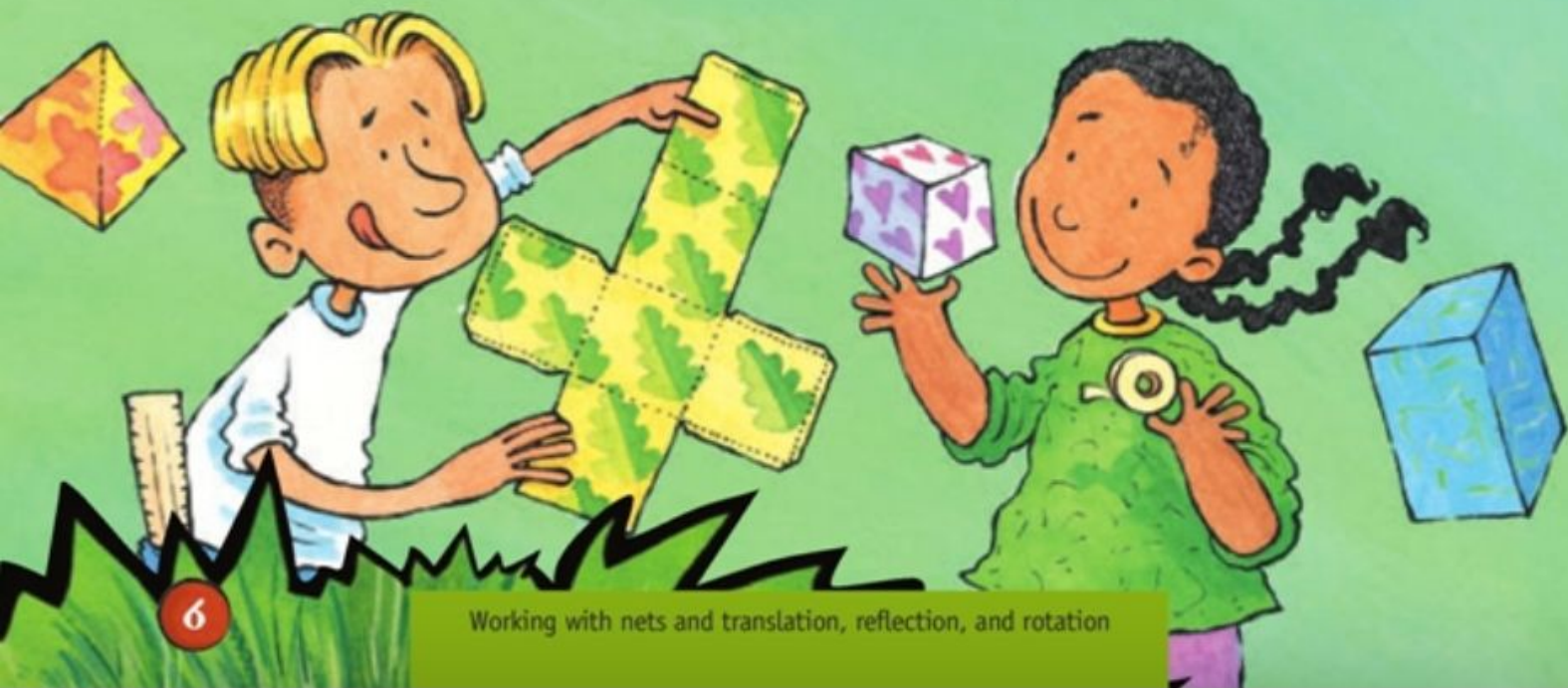
You need a classmate paints, crayons, or felt-tip pens
 different-shaped small boxes scissors tape
 light cardboard a ruler square grid paper

A net is a pattern of polygons that can be folded up to form a solid shape called a polyhedron.

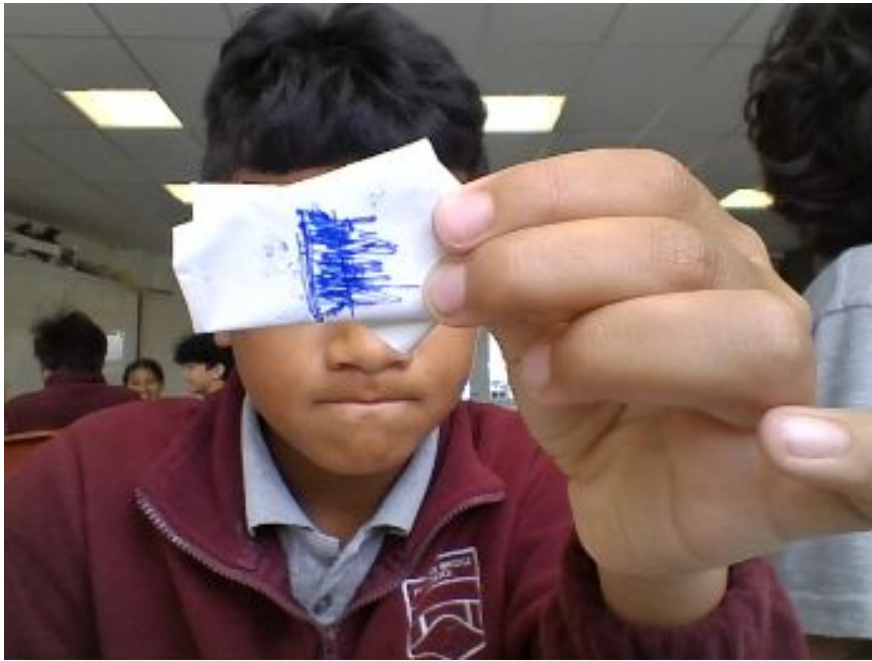
Activity

Room 7 are making boxes to put sweets in.

- Follow these instructions to make your own box.
 - Carefully pull apart two or three different-shaped boxes and look at the nets.
 - Design a net for a smaller version of your box on square grid paper.
 - Cut out the net and make up the box.
 - If you like the design, enlarge the net and copy it onto cardboard. The base needs to be at least 5 centimetres by 5 centimetres square.
 - If you don't like your box, design another net.
- Now you are ready to decorate the net and make it up.
 - Make a stencil to use to decorate the net.
 - Use the stencil to decorate one face of the net.
 - Translate, reflect, or rotate the design onto the other faces of the net.
 - Tape your box together.
 - Show your box to a classmate and describe your design.



Making Boxes

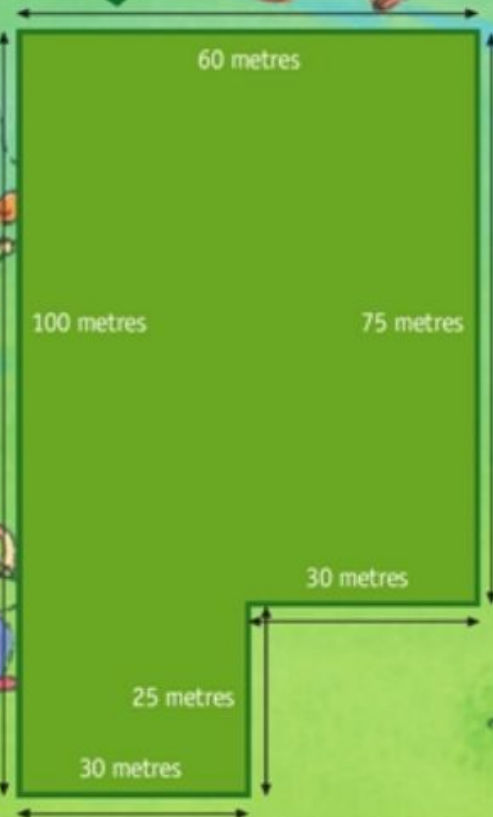
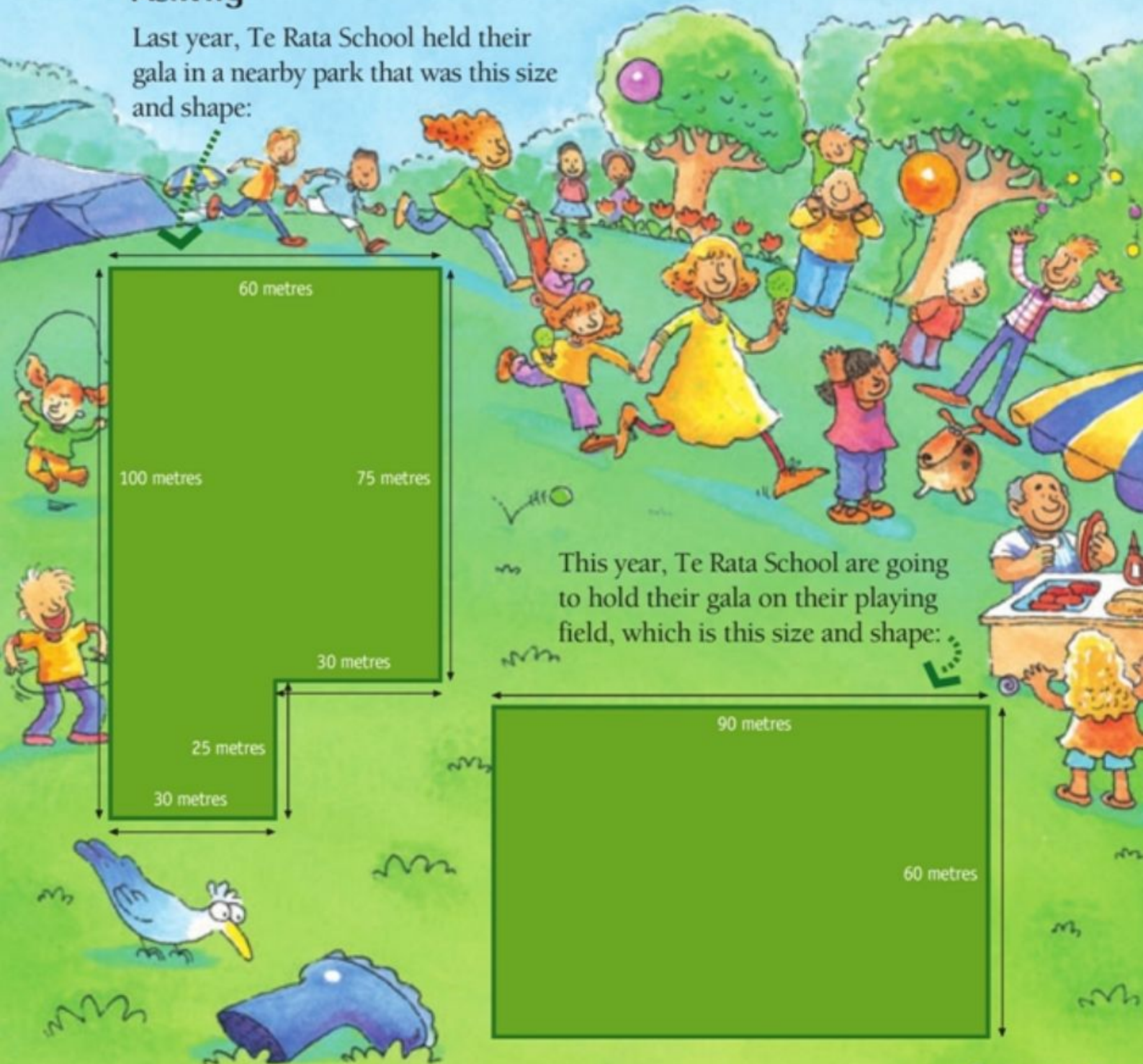


Is There Room?

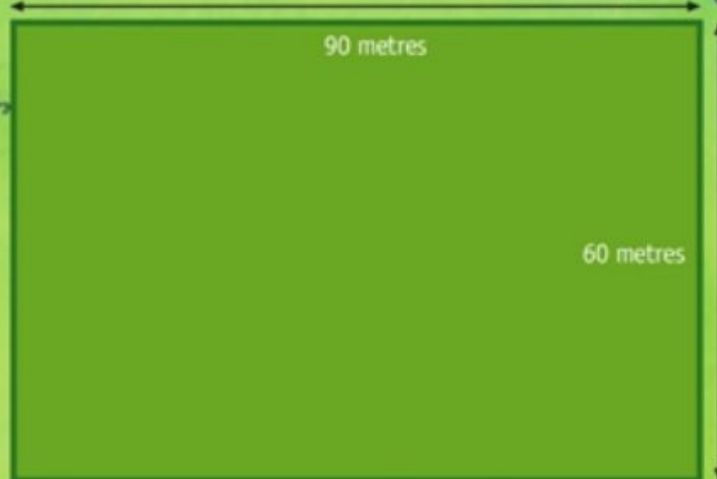
You need a calculator (optional)

Activity

Last year, Te Rata School held their gala in a nearby park that was this size and shape:



This year, Te Rata School are going to hold their gala on their playing field, which is this size and shape:



They need the same area this year as they had last year.

Is there enough room on the playing field for the gala? How do you know?

Is there room?

1. Is there enough room on the playing field for the gala? How do you know?

There is enough room for the gala because half of the school can go on field 1 and the other half can do it on field 2 and the switch over each time

Working out:

$$90 \text{ m} / 60 \text{ m} = 150$$

$$60 \text{ m} / 100 \text{ m} = 160$$

$$75 \text{ m} / 30 \text{ m} = 105$$

$$30 \text{ m} / 25 \text{ m} = 55$$

$$150\text{m}+160\text{m}+105\text{m}+55\text{m}=470\text{m}$$