

## Chapter 14

# Data Handling



0433CH14



I like Mathematics and Arts very much.



I like Languages very much. I enjoy listening to and reading stories.

I really enjoy reading about the environment and like to play different sports.

Let's find out from our class which subject they like the most.



Let us make a question to ask the class.

**Look at the questions asked by Rohan and Anjali.**

Tick the question that is the most appropriate for finding the 'most liked subject'? Why do you think so? Discuss with your friends and teacher.

Which subjects do you like?



Rohan

Physical Education, Mathematics, The World Around Us

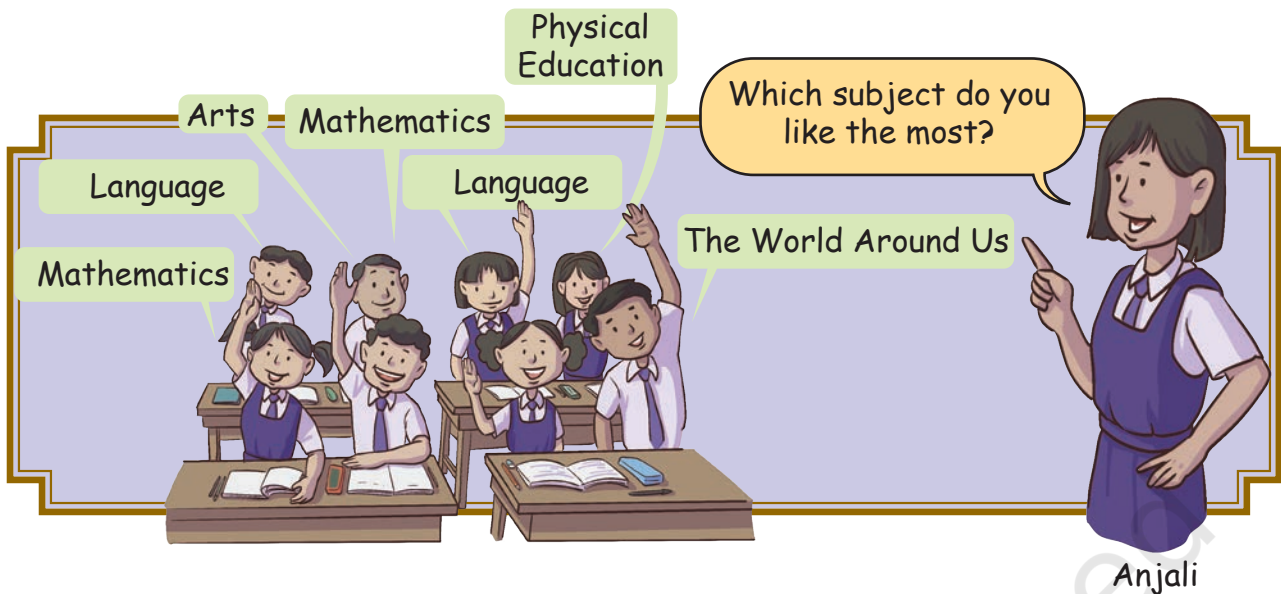
Mathematics, Languages, Arts

Arts, Languages

The World Around Us, Mathematics, Languages, Arts

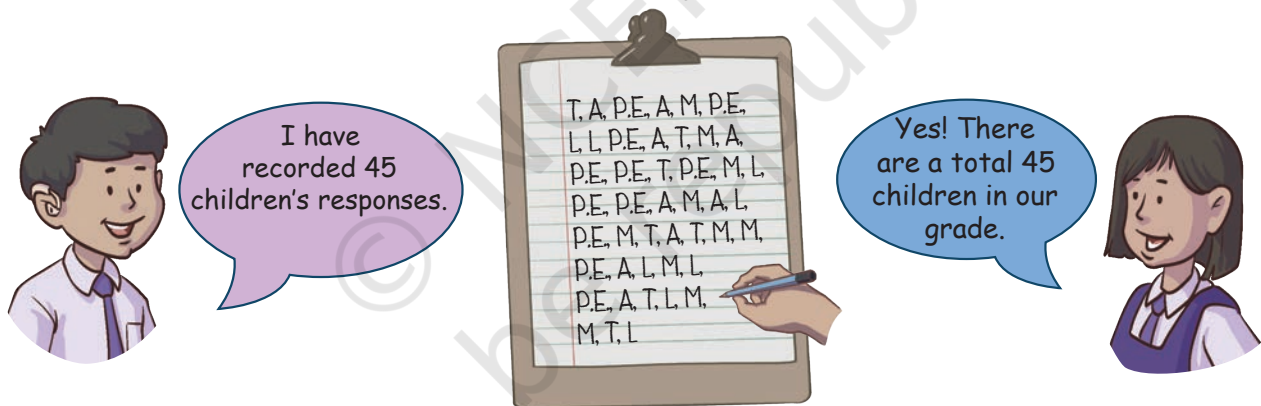
Languages, The World Around Us, Physical Education





Anjali and Rohan recorded the children's answers (responses) to the above question as follows:

They wrote M for Mathematics, L for Languages, T for The World Around Us, A for Arts and P.E. for Physical Education.



**Look at the children's responses above and answer the following questions:**

- The number of children who like Mathematics the most is \_\_\_\_\_.
- The number of children who like Language the most is \_\_\_\_\_.
- The number of children who like The World Around Us the most is \_\_\_\_\_.
- The number of children who like Physical Education the most is \_\_\_\_\_.
- The number of children who like Arts the most is \_\_\_\_\_.

Let's fill the above information in this table.

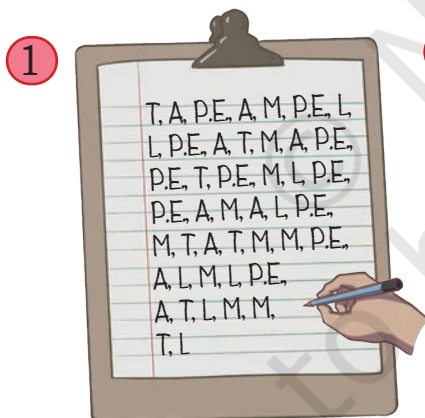
Subjects	No. of Children
Mathematics (M)	_____
Languages (L)	_____
The World Around Us (T)	_____
Physical Education (P.E.)	_____
Arts (A)	_____

Now look at the above table and answer the following questions:

- What is the most common favourite subject among the children?  
\_\_\_\_\_

- What is the least common favourite subject among the children?  
\_\_\_\_\_

There are the following two ways to display the information.



2

Subjects	No. of Children
Mathematics (M)	_____
Languages (L)	_____
The World Around Us (T)	_____
Physical Education (P.E.)	_____
Arts (A)	_____

Which way of displaying information is easier to understand and why?  
\_\_\_\_\_

**Note for Teachers:** Discuss how a question needs to be framed and what words should be used.



## Colourful Golas

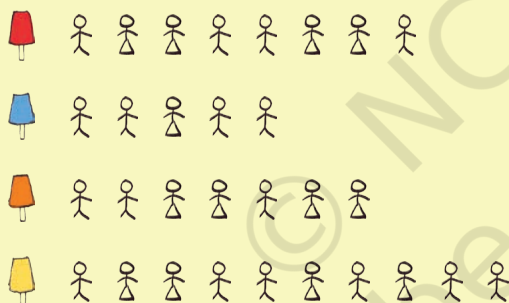
During school lunch break children rush to eat *gola* of their favourite colour.

Rohan and Anjali record the *golas* eaten by different children. They want to eat the one that is most eaten by others.

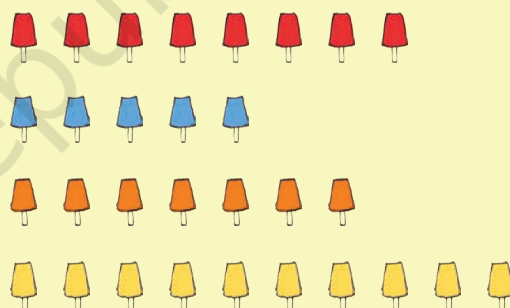
They both start recording the *golas* eaten by the children.



**Rohan**



**Anjali**



Look at the information given above. Colour the line drawing of the *golas* appropriately.

1. Which colour ice *gola* do the children eat:

a) the most



b) the least



How do you know?

2. Which colour *gola* would Anjali and Rohan have bought?





3. Which colour *golas* did boys eat the most?



4. Which colour *golas* did girls eat the most?



5. Which of the ways of representing data did you use to answer these questions and why?

### Activity — Chess or Cricket

Find out from your classmates how many of them play only chess, only cricket, both or neither.

Area for data collection and representation.

Now let us organise the above data in the table.

Nature of Games	No. of Girls	No. of Boys
Chess but not Cricket		
Cricket but not Chess		
Both		
Neither		

**Answer these questions based on the data collected from your grade.**

1. Who plays Chess the most? \_\_\_\_\_ (Boys/Girls)
2. Who plays Cricket the most? \_\_\_\_\_ (Boys/Girls)
3. How many children play both types of games? \_\_\_\_\_



## Bal Mela

Anjali and Rohan have recorded the number of people who ate fruit chaats and sandwiches in the Bal Mela over three days, using a Pictograph.



**Anjali: Fruit Chaat**

Days	Total Fruit Chaats
Day 1	
Day 2	
Day 3	

**Rohan: Sandwiches**

Days	Total Sandwiches
Day 1	
Day 2	
Day 3	



### Let Us Do

- Complete the table.

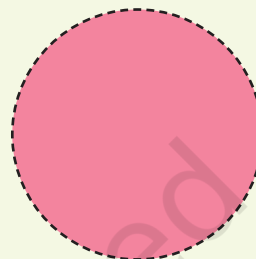
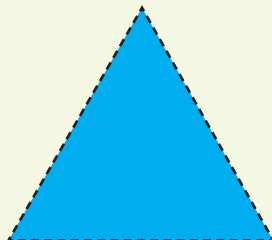
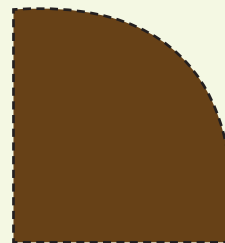
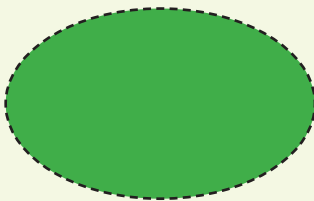
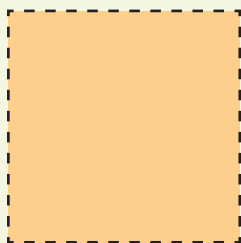
Items	Total Sold Items
Fruit Chaats	
Sandwiches	

- On which day were the most sandwiches sold?
- Which item had the highest sale on Day 2?
- Complete the table given below. Circle the day that had the highest sales.

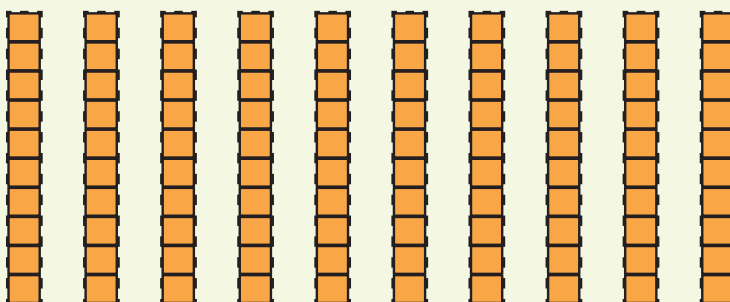
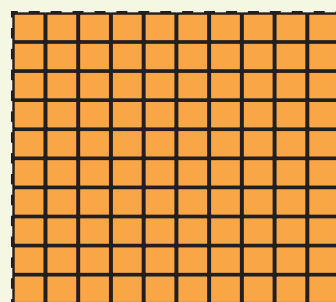
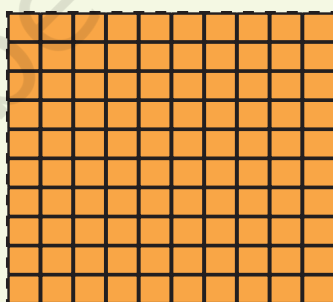
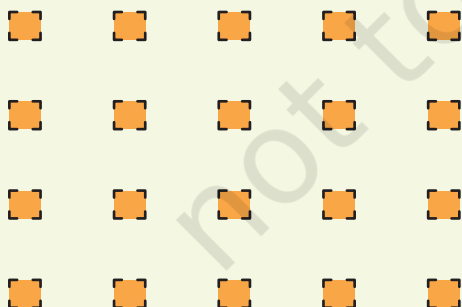
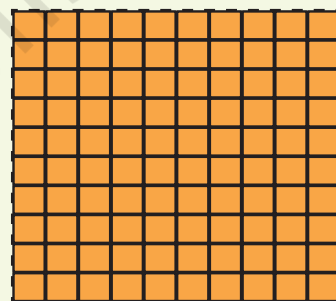
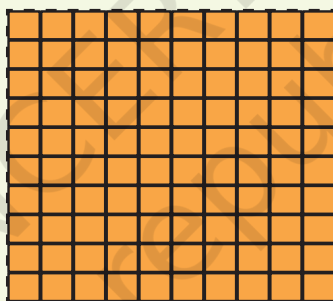
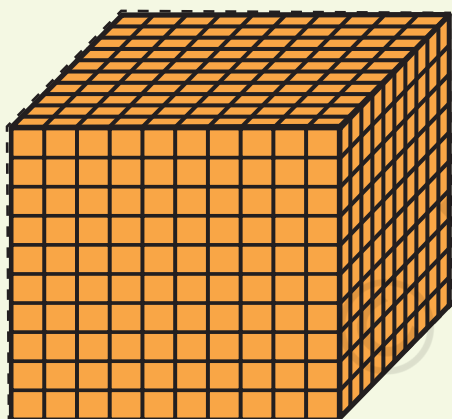
Day	Total Sales
Day 1	
Day 2	
Day 3	

## 2D Shapes

**Note:** Use the shapes given below in Chapter 1



## Dienes Blocks



**Note:** Make more Dienes blocks if needed



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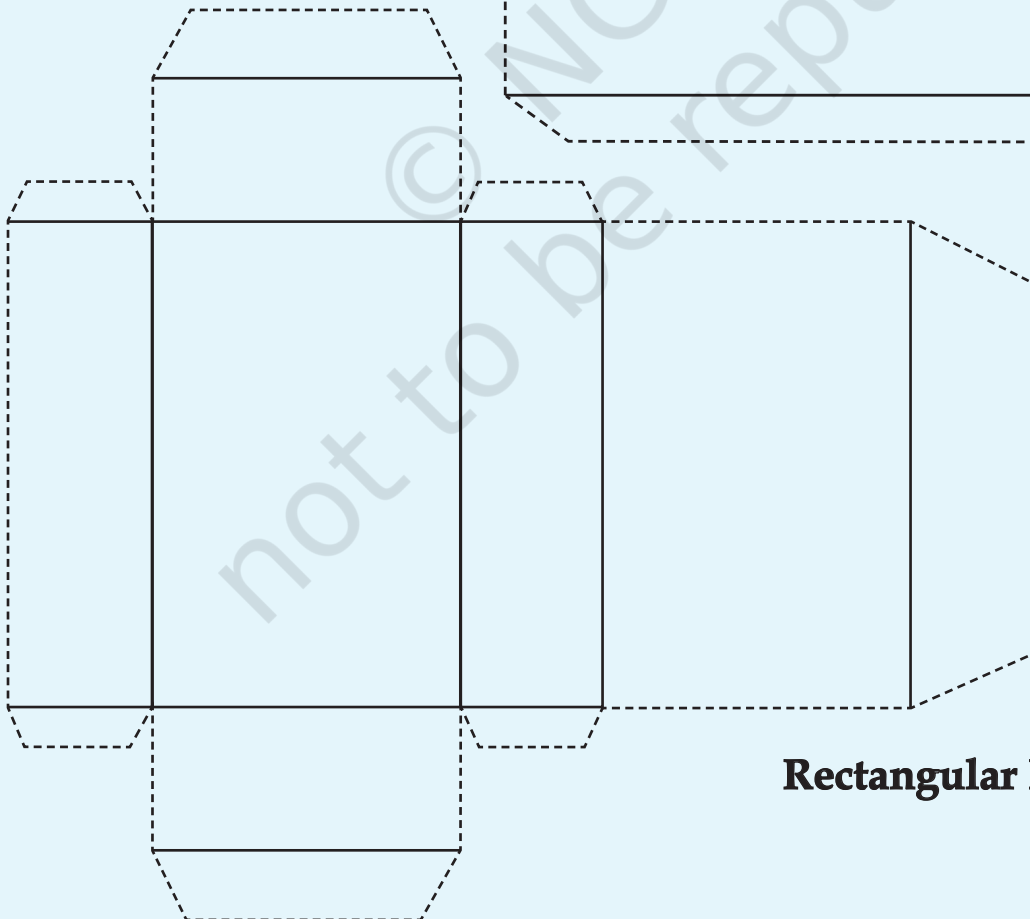
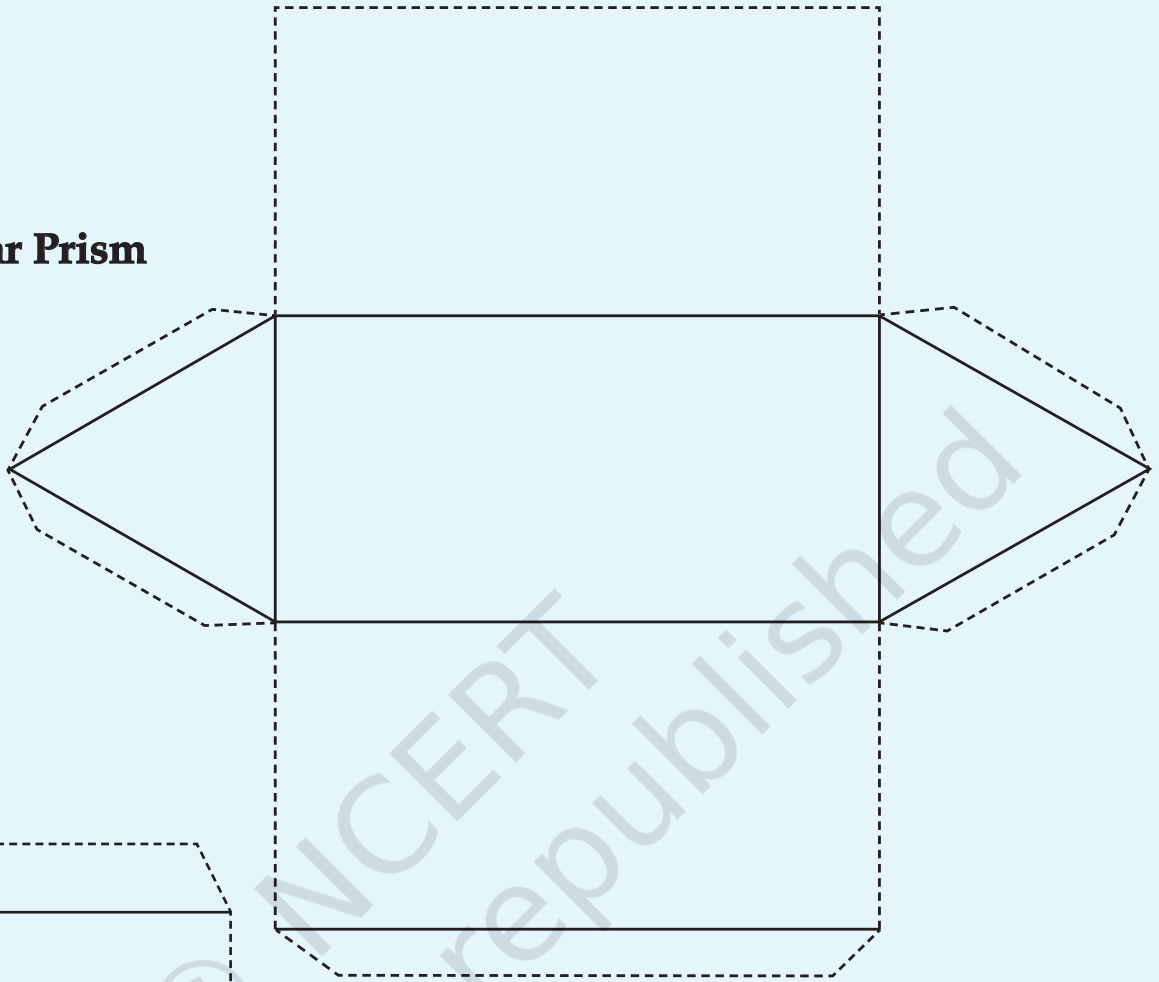




# Nets of a Triangular Prism and Rectangular Prism/Cuboid

**Note:** Cut along the dotted lines and fold along the dark lines.

**Triangular Prism**



**Rectangular Prism / Cuboid**





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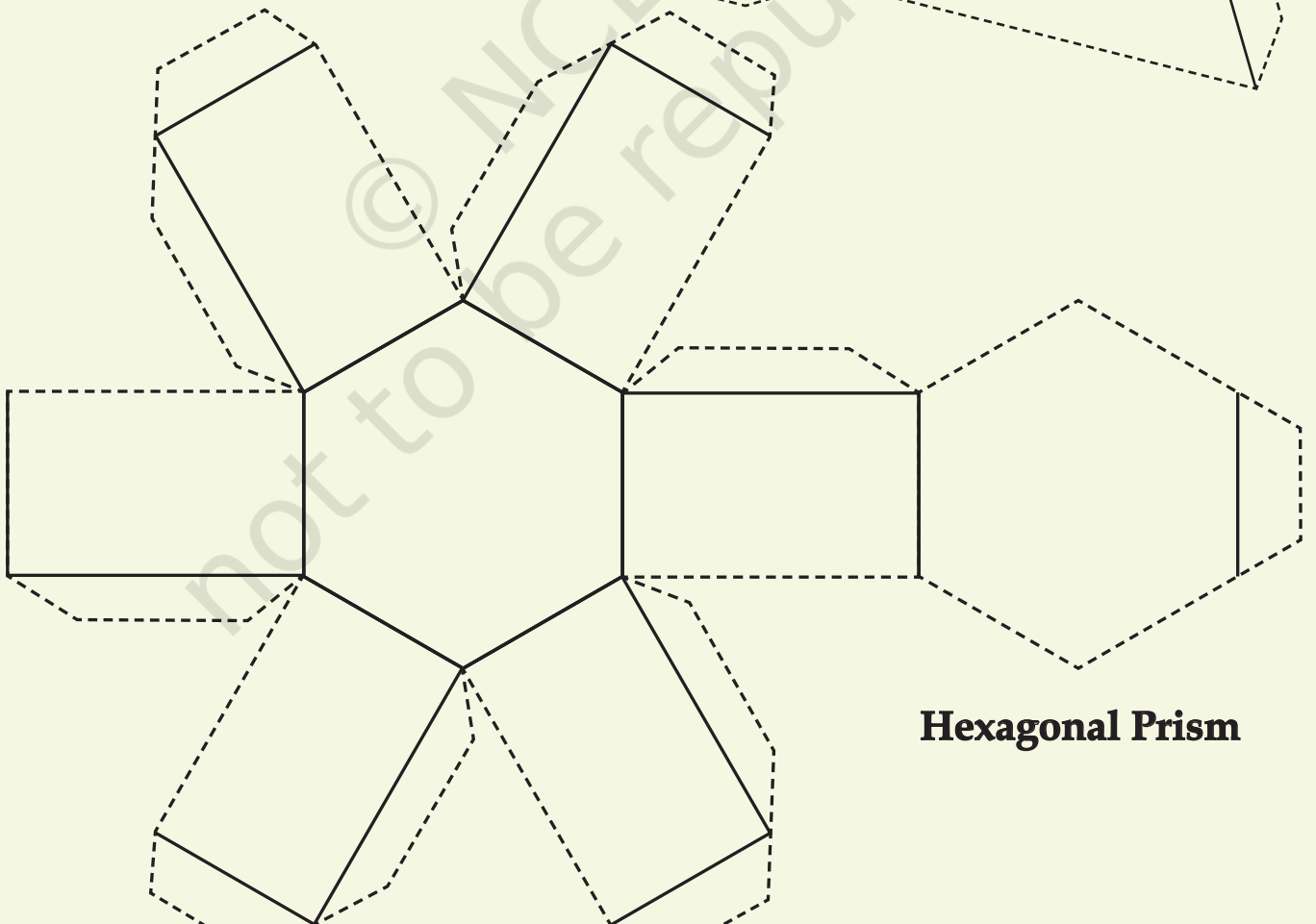
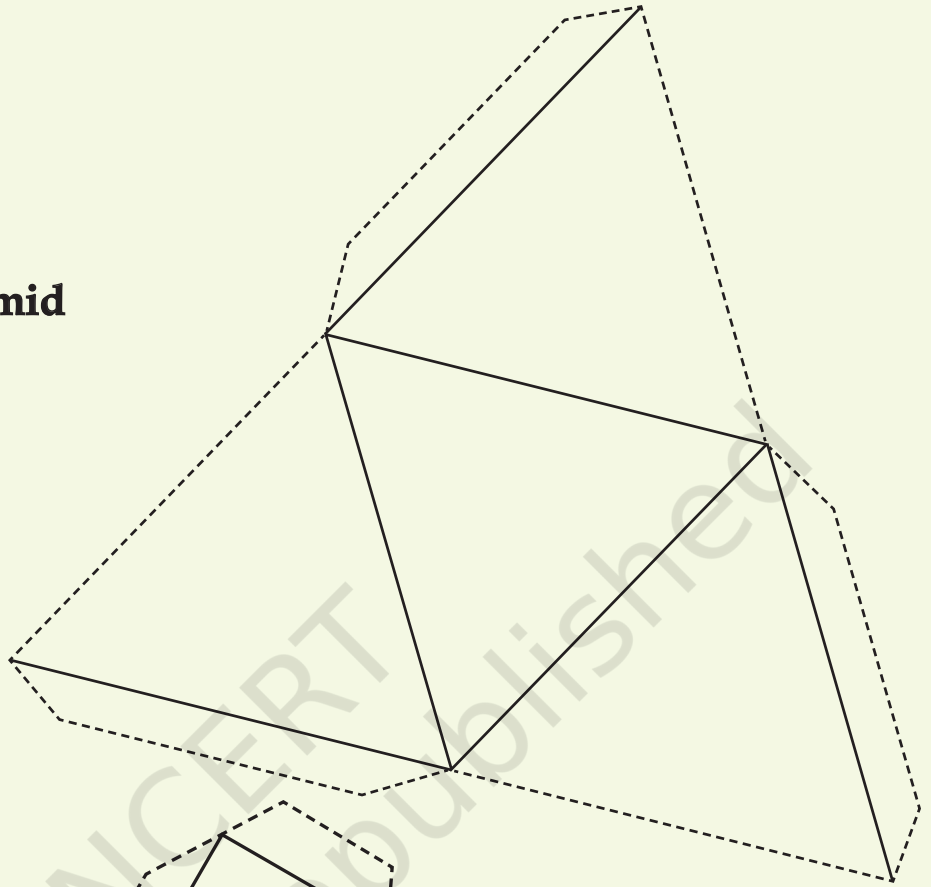




## Nets of a Triangular Pyramid and Hexagonal Prism

**Note:** Cut along the dotted lines and fold along the dark lines.

**Triangular Pyramid**



**Hexagonal Prism**





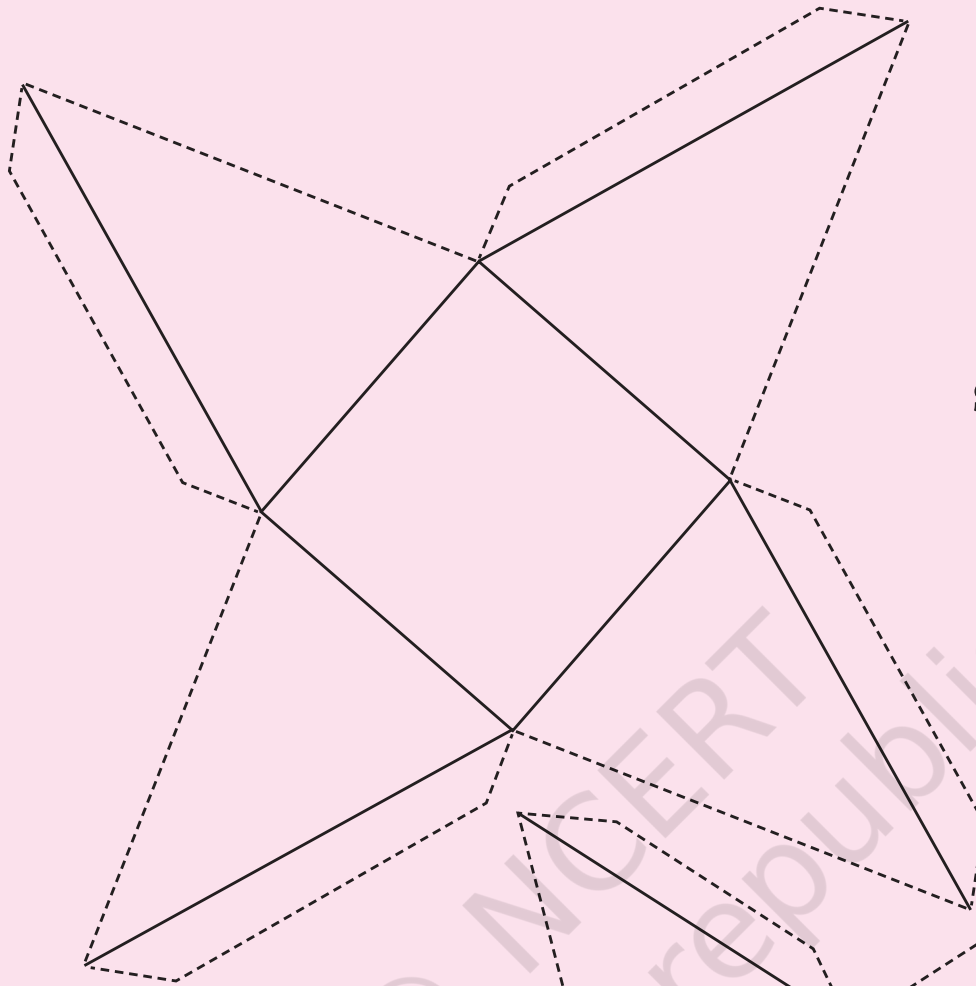
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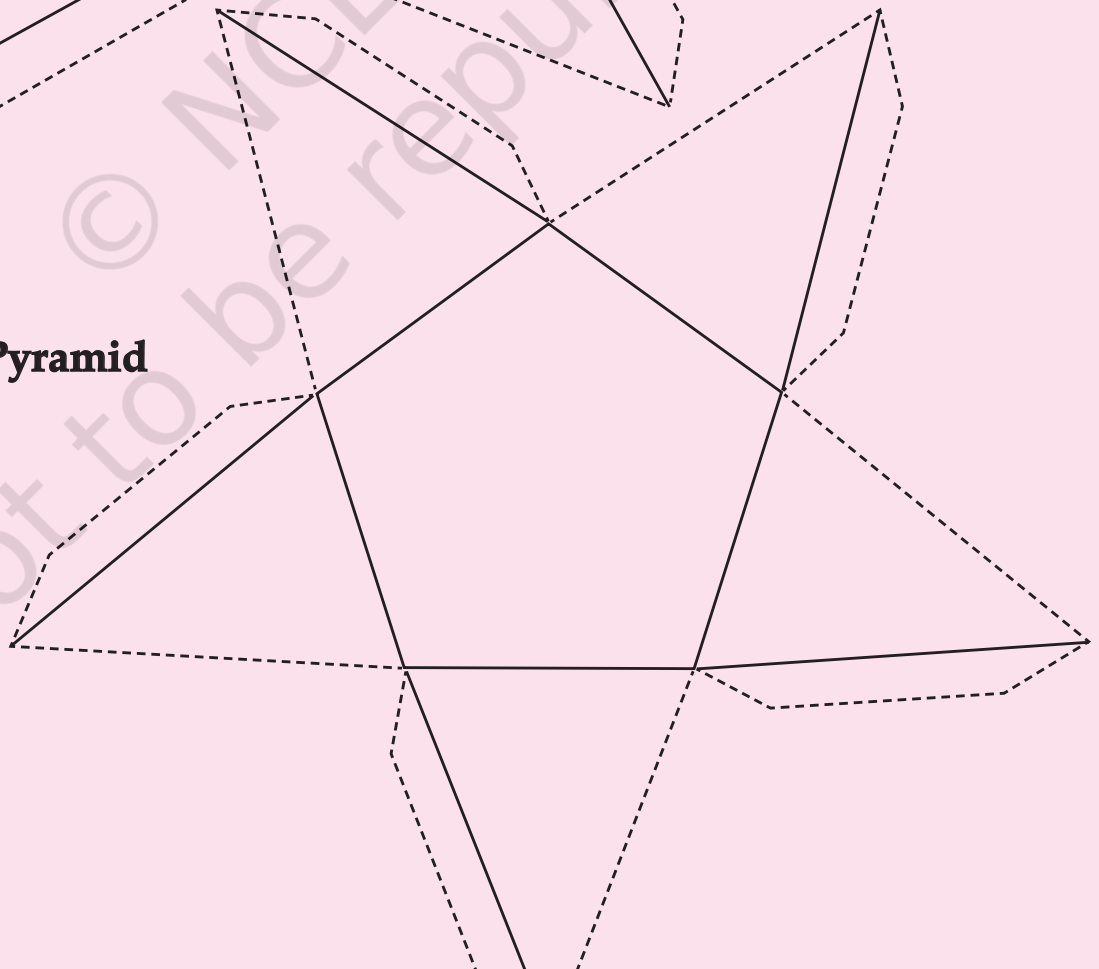
## Nets of a Square Pyramid and Pentagonal Pyramid

**Note:** Cut along the dotted lines and fold along the dark lines.



**Square Pyramid**

**Pentagonal Pyramid**



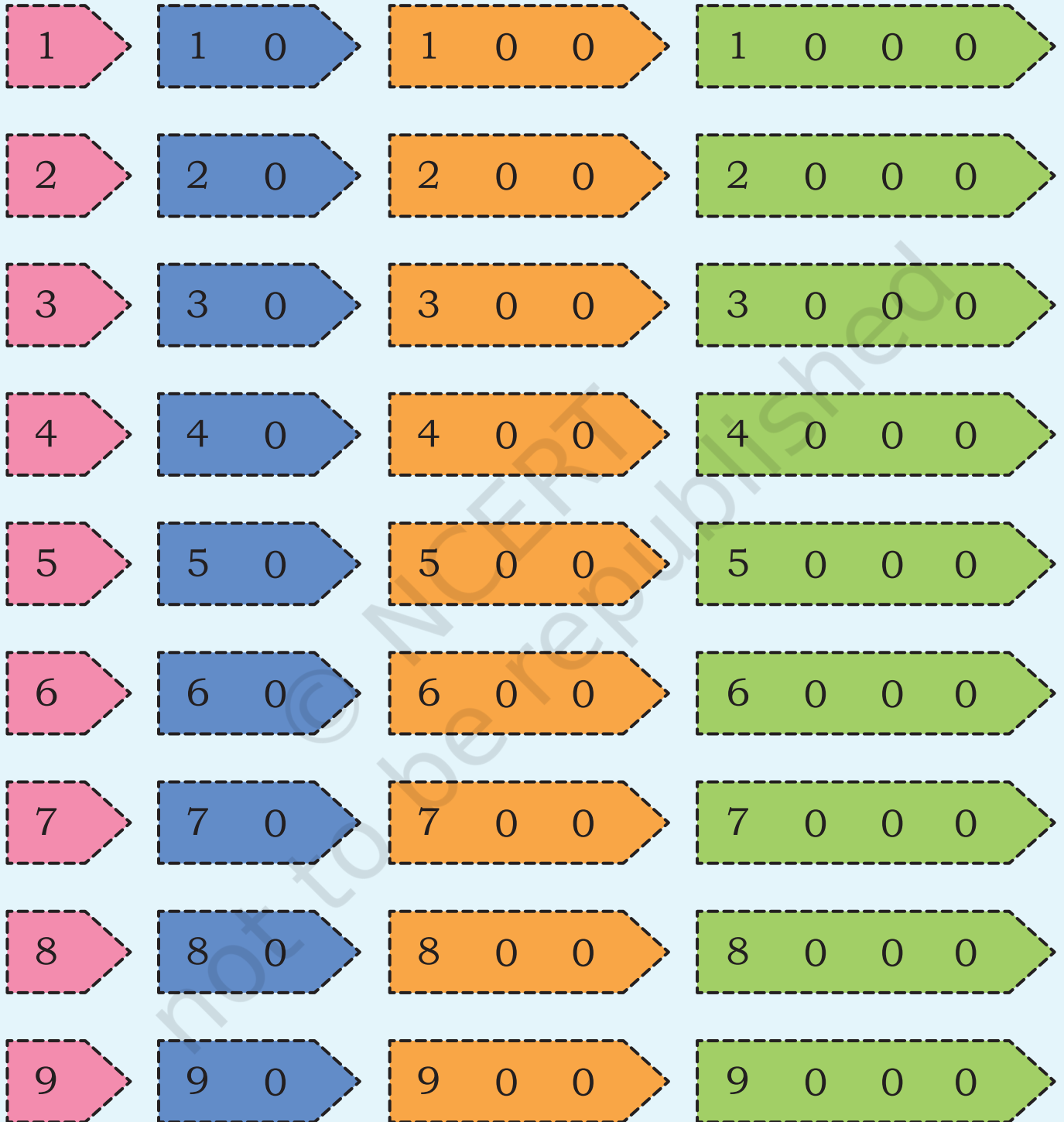


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## Arrow Cards

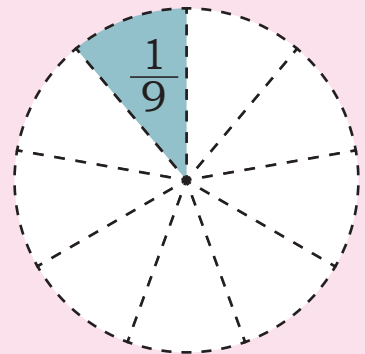
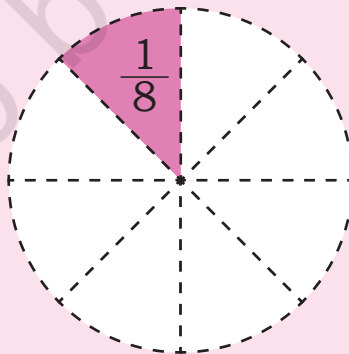
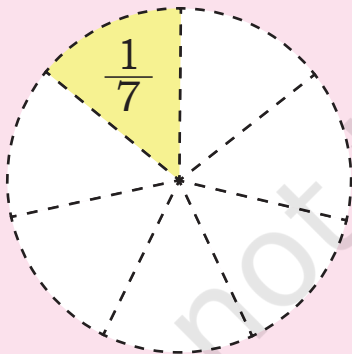
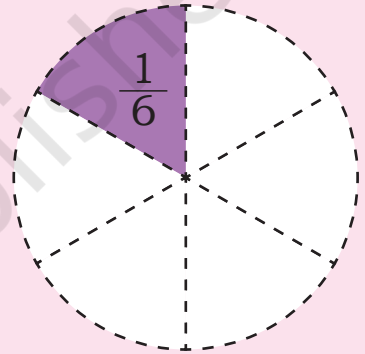
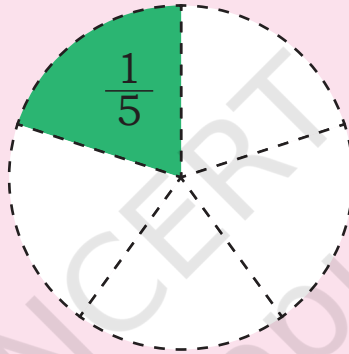
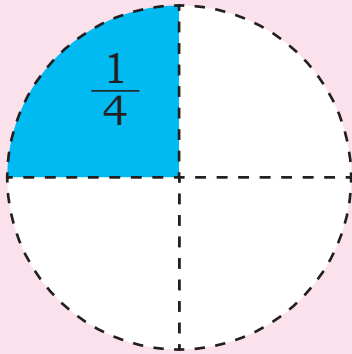
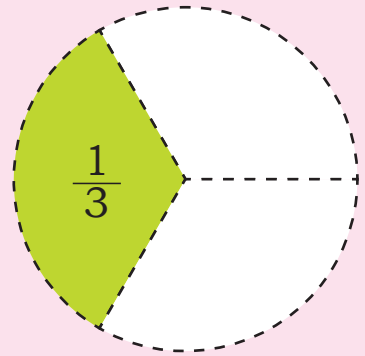
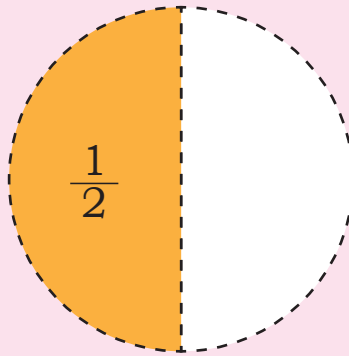
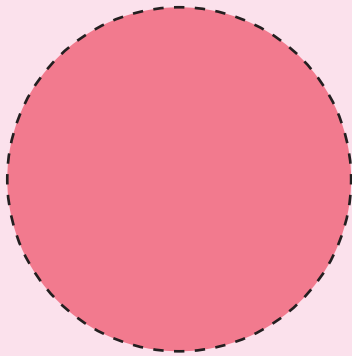




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## Fraction Kit



Cm Scale





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## Number Tokens

1000 1000 1000 1000 1000

1000 1000 1000 1000

100 100 100 100 100  
100 100 100 100 100  
100 100 100 100 100  
100 100 100 100 100

10 10 10 10 10 10 10  
10 10 10 10 10 10 10  
10 10 10 10 10 10

1 1 1 1 1 1 1 1  
1 1 1 1 1 1 1 1  
1 1 1 1





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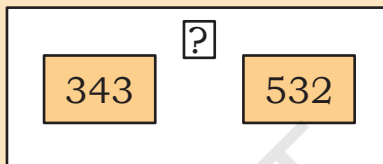


## Note for Teachers

Box diagrams help students decode word problems as well as find strategies to solve them. The following examples are typical of all word problems in addition and subtraction. The operation that needs to be carried out can be decided depending on which boxes are filled in any problem. The three types of problems are combine, compare and change. Each problem can be represented using a slightly different box diagram so that one can capture the problem fully.

Example 1: Combine: Involves two different sets/collections. For example, there are 343 children in the Preparatory Stage and 532 in the Middle Stage in a school. How many total children are there in these two stages?

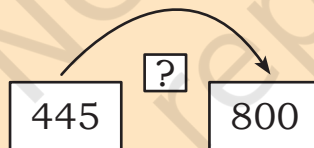
$$343 + 532 = ?$$



Example 2: Change: Involves change in an existing set/quantity. For example, I have 445 in my piggy bank. After three months, I ended up with 800 in the bank. How much has the amount in my bank increased in three months?

$$445 + ? = 800$$

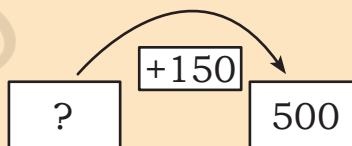
$$800 - 445 = ?$$



Example 3: Change: There are some potatoes in Sohan's shop. He bought 150 kg more and now has 500 kg of fresh and old potatoes. How many kg of potatoes did he have initially?

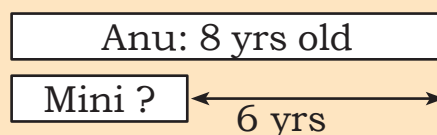
$$? + 150 = 500$$

$$500 - 150 = ?$$



Example 4: Compare: Involves comparing two quantities. For example, Anu is 6 years older than her sister Mini. Anu is 8 years old now. How old is Mini?

$$8 = ? + 6$$



## Note

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