

MATHEMATICS WORKBOOK

KG

For the preparation of National
& International Olympiads



- Chapter-wise practice exercises
- Previous year paper

CREST Mathematics Olympiad (CMO)

Mathematics Olympiad

Exams Preparation Book

Grade KG



#CRESTInnovator

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CREST Mathematics Olympiad Workbook for Grade KG

Fourth Edition

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Disclaimer: The information in the Workbook is to give you the path to success but it does not guarantee 100% success as the strategy is completely dependent on its execution. And it is based on previous year papers of CMO exam.

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Contents

1. Basic Concepts on Comparison	5
2. Numbers	34
3. Playing with Numbers.....	68
4. Shapes.....	71
5. Time and Calendar.....	80
6. Previous Year Paper (2023-24)	90
7. Answer Key.....	93

Preface

We are pleased to launch a thoroughly revised edition of this workbook. We welcome feedback from students, teachers, educators and parents. For improvements in the next edition, please send your suggestions at info@crestolympiads.com. Our team will make an effort to work on those suggestions. The status of the improvements can be checked at <https://www.crestolympiads.com/corrections-class0-685>

CREST Olympiads is one of the largest Olympiad Exams with students from more than 60 countries. The objective of these exams is to build a competitive spirit while evaluating students on conceptual understanding of the concepts.

We strive to provide a superior learning experience, and this workbook is designed to complement the school studies and prepare the students for various competitive exams including the CREST Olympiads. This workbook provides a crisp summary of the topics followed by the practice questions. These questions encourage the students to think analytically, to be creative and to come up with solutions of their own. There is a previous year's paper given at the end of this workbook for the students to attempt after completing the syllabus. This paper should be attempted in 45 minutes to get an assessment of the student's preparation for the final exam.

Publishers

Chapter 1

Basic Concepts on Comparison

Basic Concepts on Comparison

more



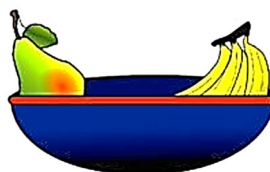
less



more

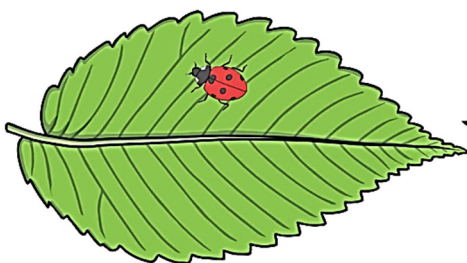
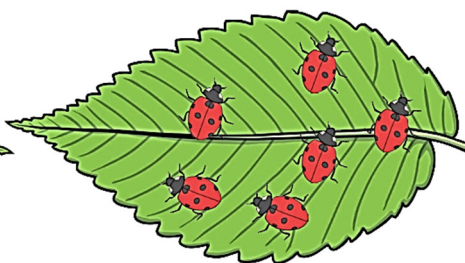


less



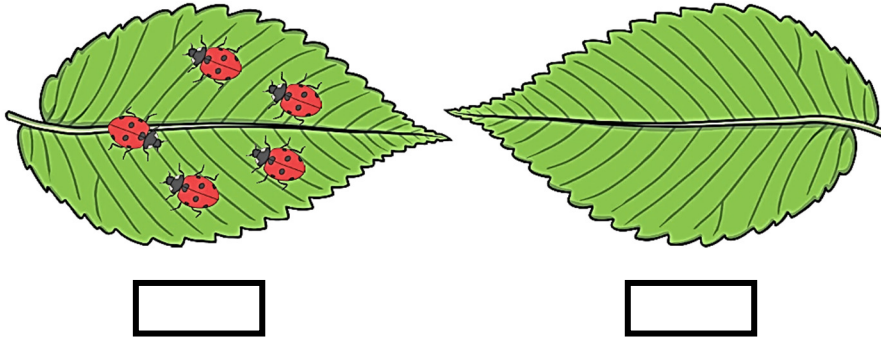
When we use the word more, it means the number of objects is bigger or greater. When we use the word less, it means the number of objects is smaller or fewer.

Count the lady bugs and tick the leaf which has more ladybugs:

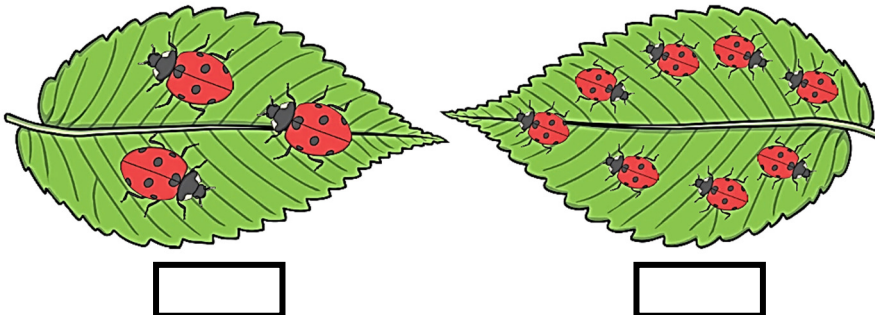
☐☐

Basic Concepts on Comparison

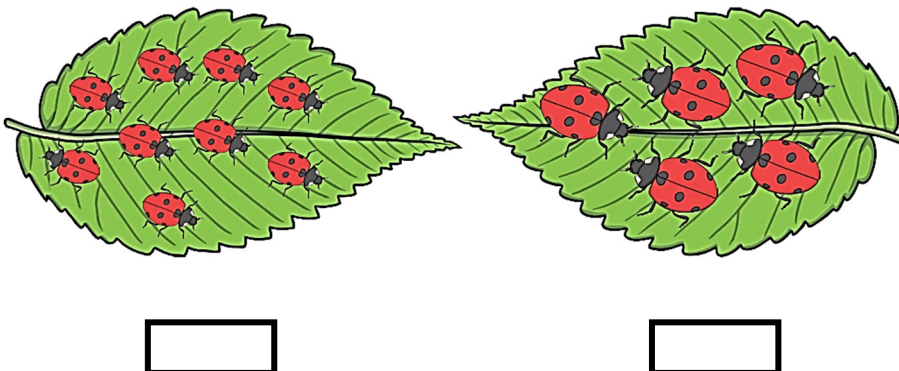
Count the lady bugs and tick the leaf which has fewer lady bugs?



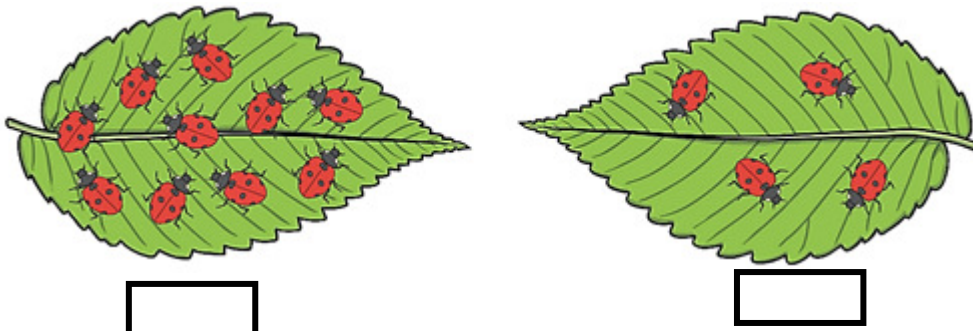
Count the lady bugs and tick the leaf which has more ladybugs?



Count the lady bugs and tick the leaf which has fewer lady bugs?

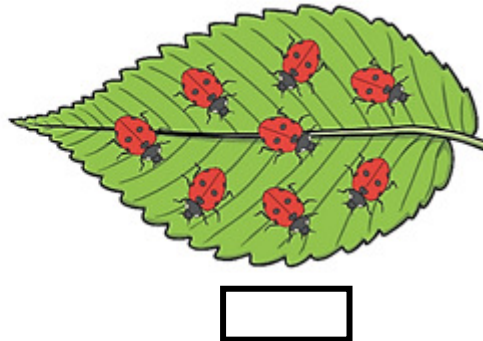
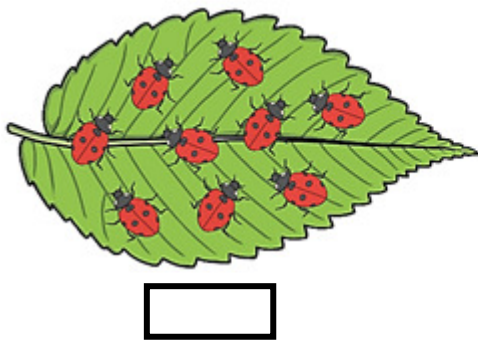


Count the lady bugs and tick the leaf which has fewer lady bugs?







Basic Concepts on Comparison

Count the lady bugs and tick the leaf which has fewer lady bugs?




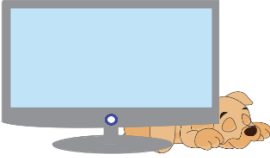


In Front and Behind

In Front

The car is in front of the house.	The worm is in front of the pot.
	
The mouse is in front of the pumpkin.	The dog is in front of the grass.
	

Behind

The worm is behind the pot.	The dog is behind the bush.
	
The mouse is behind the present.	The dog is behind the TV.
	

Activity

Choose the correct answer:

1. The cow is **in front of** / **behind** the fence.



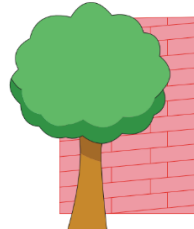
2. The goat is **in front of** / **behind** the bushes.



3. The mouse is **in front of** / **behind** the tree.



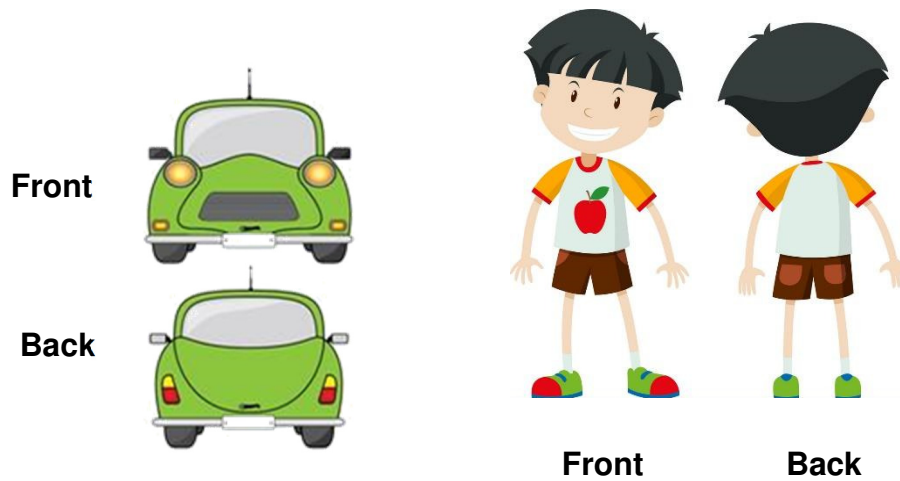
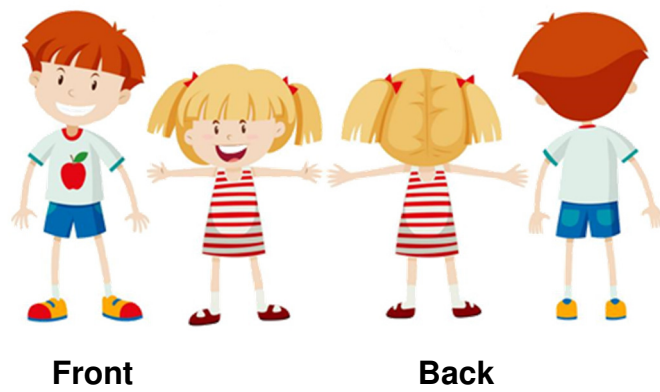
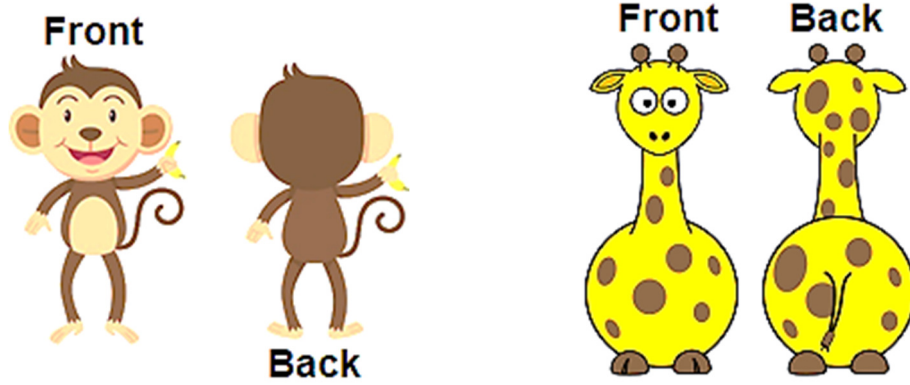
4. The tree is **in front of** / **behind** the wall.



5. The bottle is **in front of** / **behind** the bag.



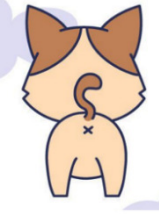



Front and Back



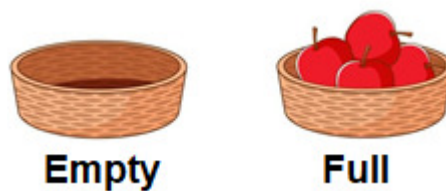
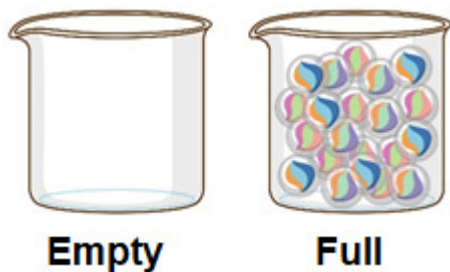
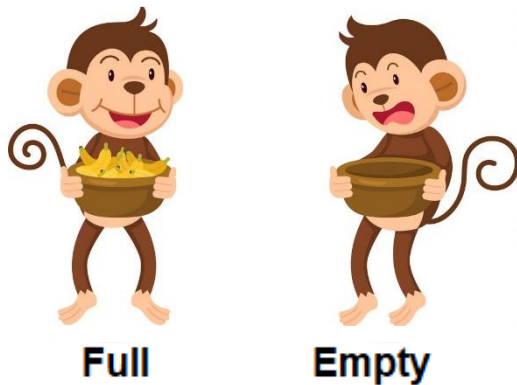
Activity

Match the fronts of the animals with their backs:







Empty and Full

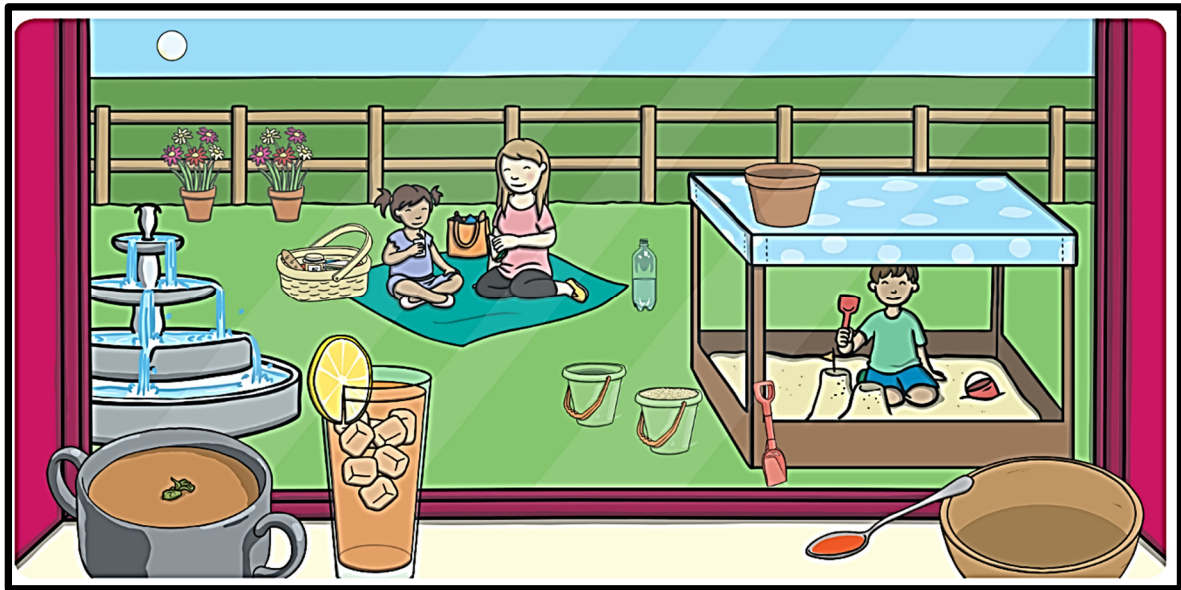
When a container does not contain anything it is called empty. A container holding as much as possible and has no more space to hold any more is said to be full.



Activity

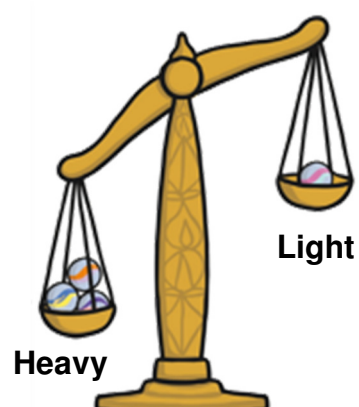
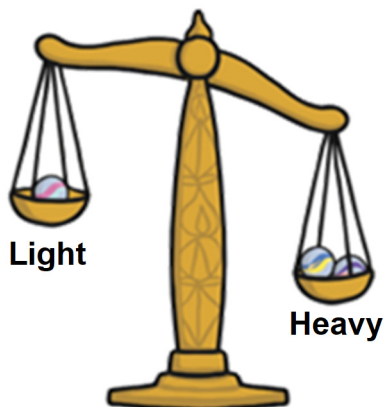
Look at the picture given below and draw circles around the following objects:

Full glass		Empty flower pot	
Empty bowl		Full moon	
Full spoon		Empty spade	



Heavy and Light

When we compare the weight of two objects, the one with more weight is said to be heavy and the one with less weight is said to be light.

















Heavy



Light

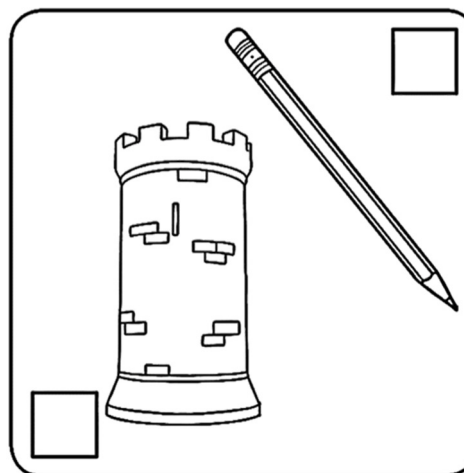
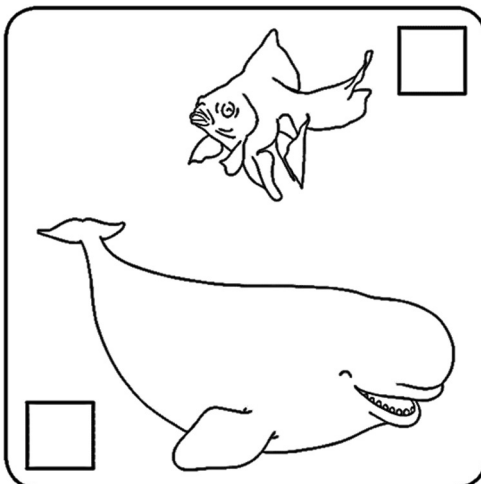
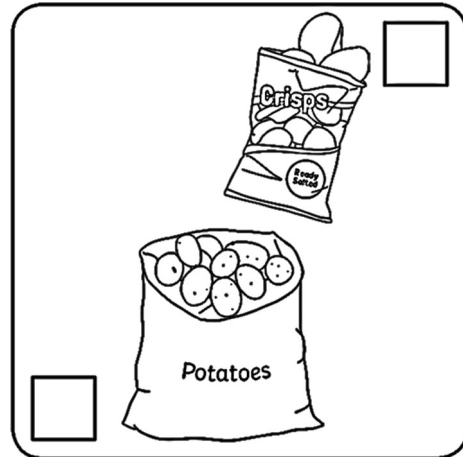
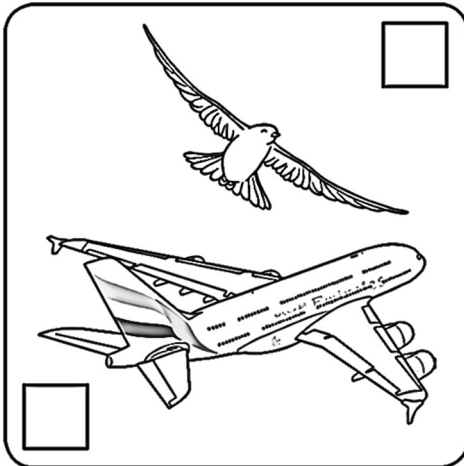
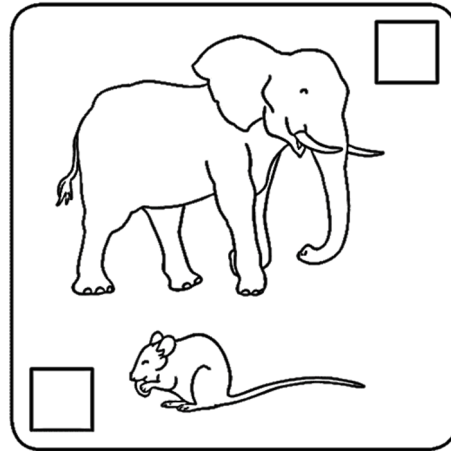
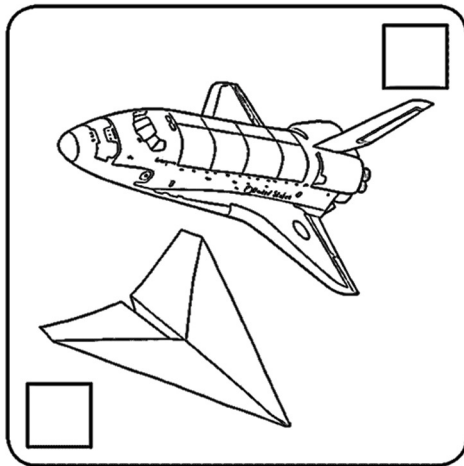
Activity

Select the heavier object:

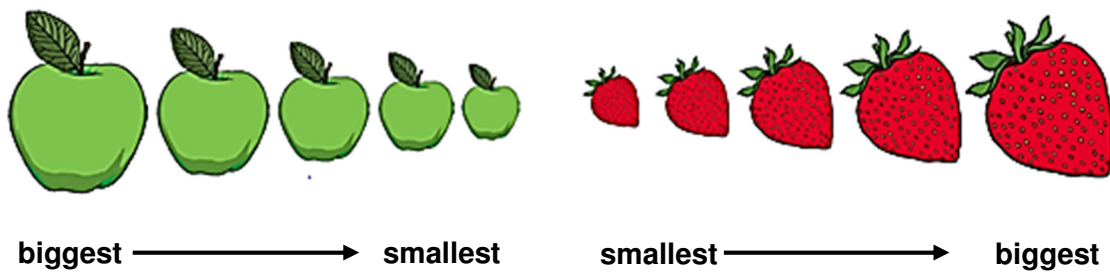
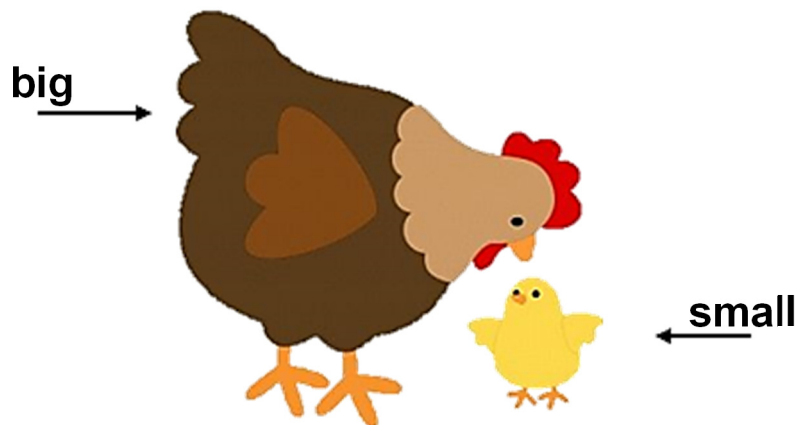
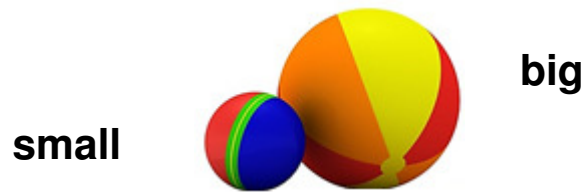
- | | | | | | |
|----|---|---|----|--|---|
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| | <input data-bbox="384 1032 504 1093" type="text"/> | <input data-bbox="643 1032 762 1093" type="text"/> | | <input data-bbox="943 1032 1062 1093" type="text"/> | <input data-bbox="1198 1032 1318 1093" type="text"/> |
| 3. |  |  | 4. |  |  |
| | <input data-bbox="384 1368 504 1429" type="text"/> | <input data-bbox="643 1368 762 1429" type="text"/> | | <input data-bbox="943 1368 1062 1429" type="text"/> | <input data-bbox="1198 1368 1318 1429" type="text"/> |
| 5. |  |  | 6. |  |  |
| | <input data-bbox="384 1686 504 1747" type="text"/> | <input data-bbox="643 1686 762 1747" type="text"/> | | <input data-bbox="943 1686 1062 1747" type="text"/> | <input data-bbox="1198 1686 1318 1747" type="text"/> |

Activity

Colour the pictures and tick the object which is lighter:

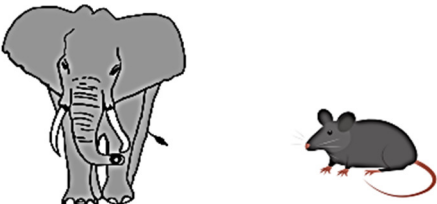
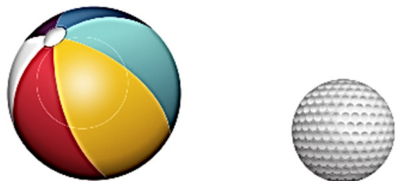




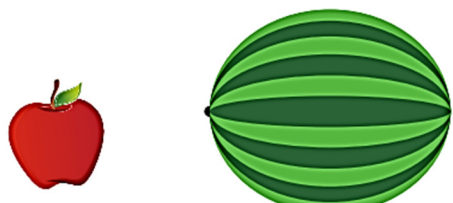
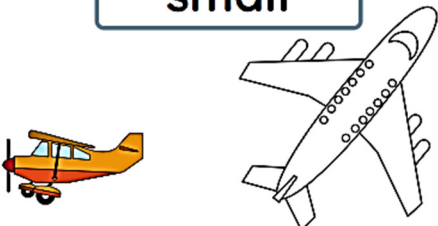


Small and Big



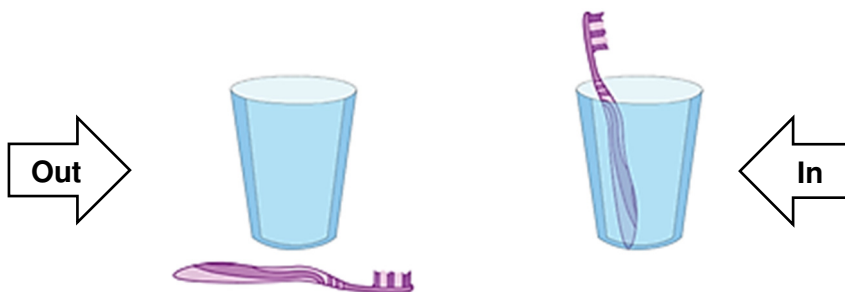
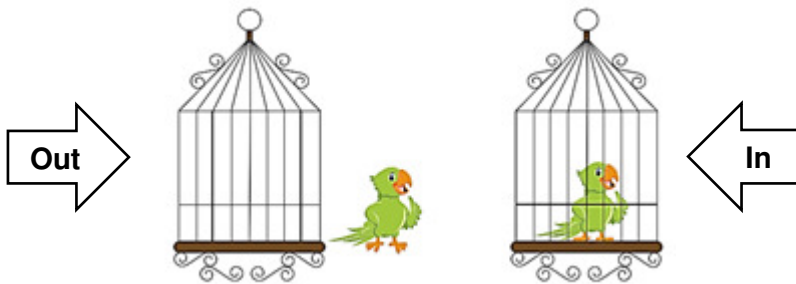
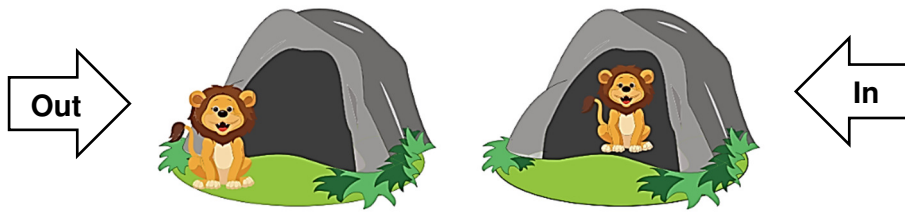
Basic Concepts on Comparison

Circle the correct picture:

<p>big</p> 	<p>small</p> 
<p>small</p> 	<p>big</p> 
<p>big</p> 	<p>small</p> 
<p>big</p> 	<p>small</p> 

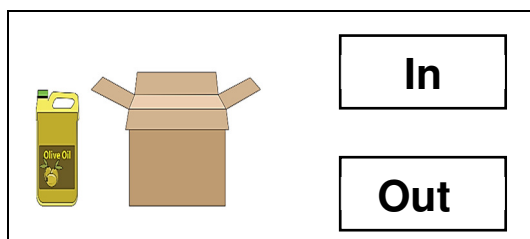
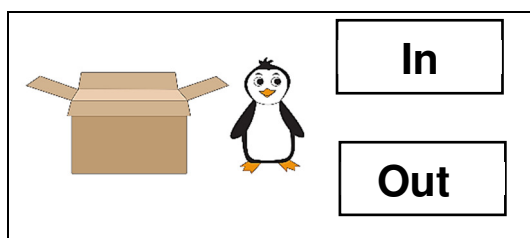
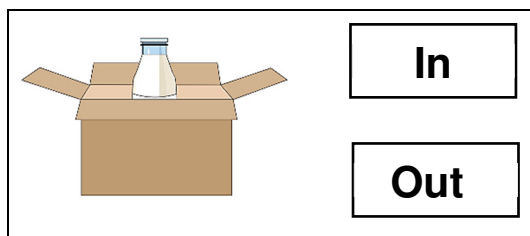
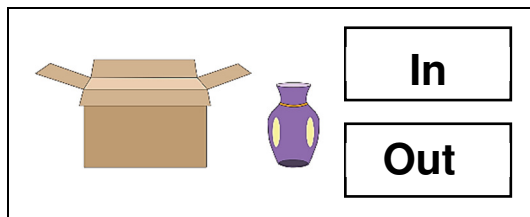
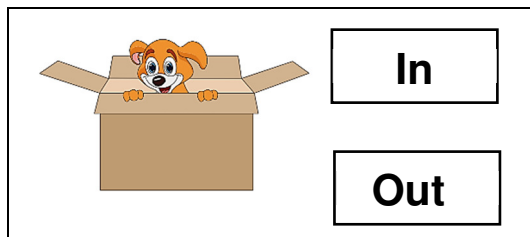
In and Out

"In" signifies the object's position inside something, and "out" represents the object's position being outside something.



Activity

Choose the correct option:

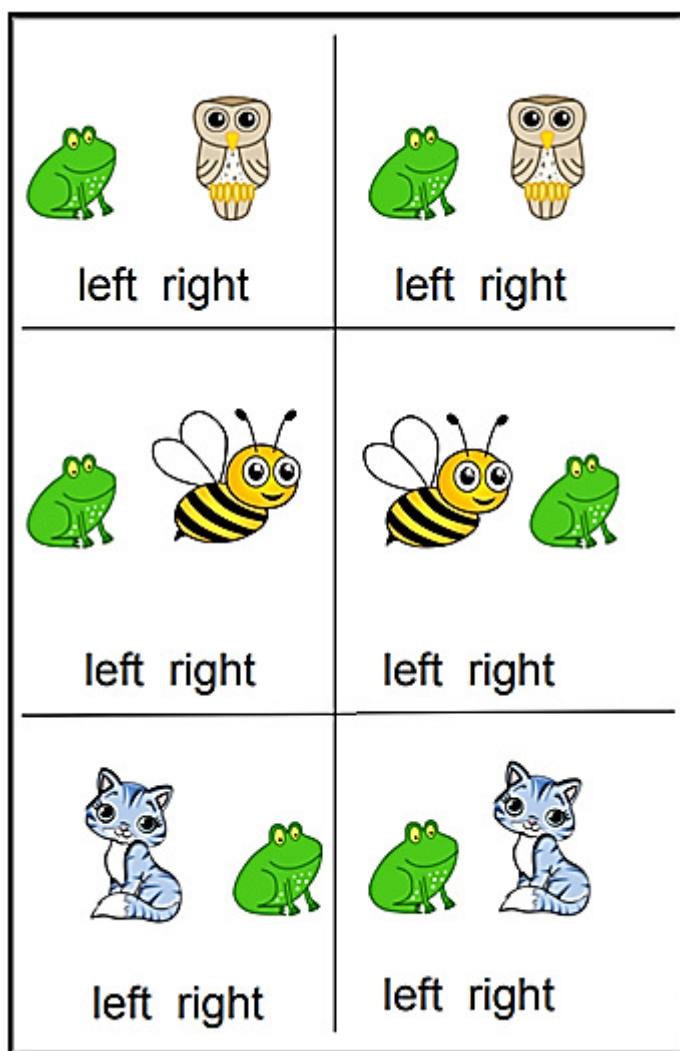


Right and Left



Choose the correct answer:

Where is the frog, left or right?



Activity

1. Draw a star to the right of the house.



2. Draw a line to the left of the tiger.



3. Draw a star to the left of the tree.



4. Draw a triangle to the right of the apple.

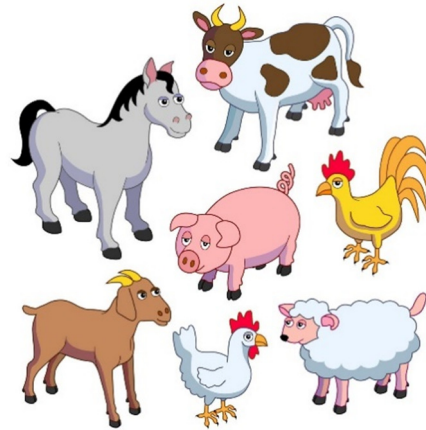


5. Draw a line to the left of the car.



Activity

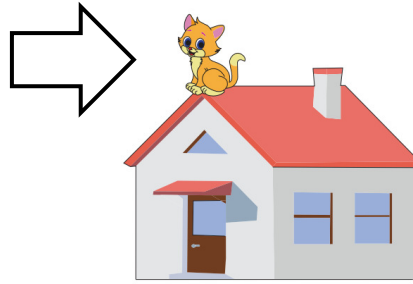
Write the names of the farm animals on the left and the safari animals on the right:



Left	Right

Top and Bottom

1. The cat is on top of the house.



















2. The child is at the bottom of the slide.



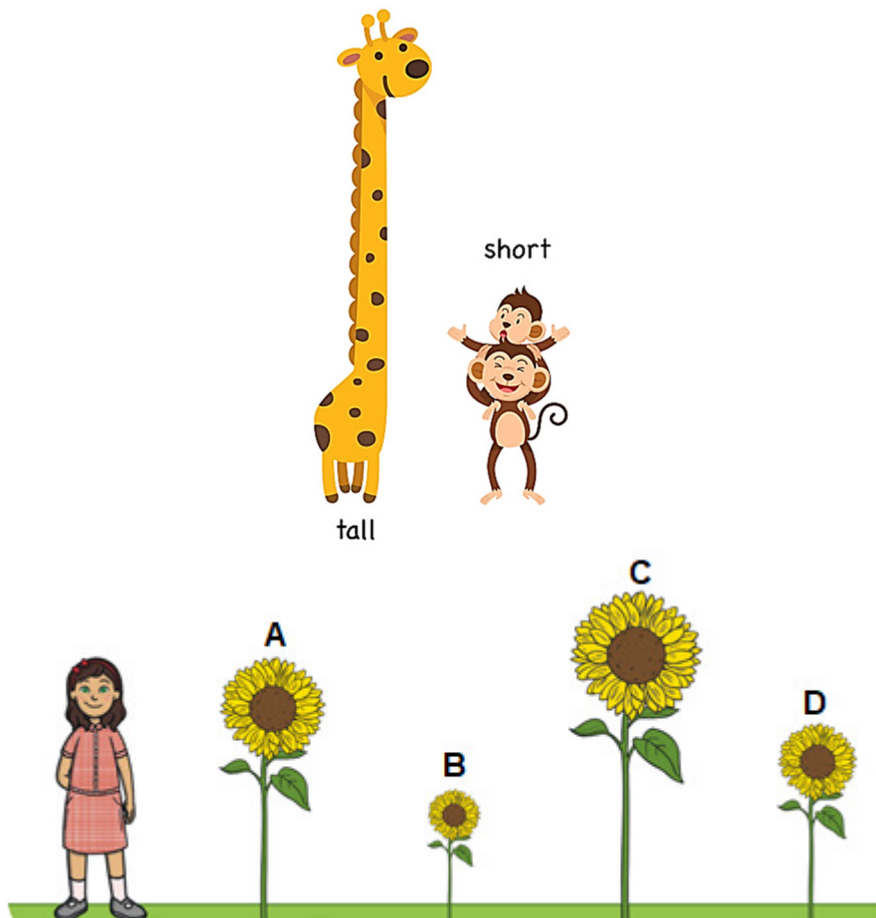
Basic Concepts on Comparison

Look at the cards and choose whether the butterfly is at the top or bottom.

1.  	<ul style="list-style-type: none">• top• bottom	2.  	<ul style="list-style-type: none">• top• bottom
3.  	<ul style="list-style-type: none">• top• bottom	4.  	<ul style="list-style-type: none">• top• bottom
5.  	<ul style="list-style-type: none">• top• bottom	6.  	<ul style="list-style-type: none">• top• bottom
7.  	<ul style="list-style-type: none">• top• bottom	8.  	<ul style="list-style-type: none">• top• bottom

Tall and Short

Tall signifies greater height from end to end, while short represents smaller distance or height from end to end.

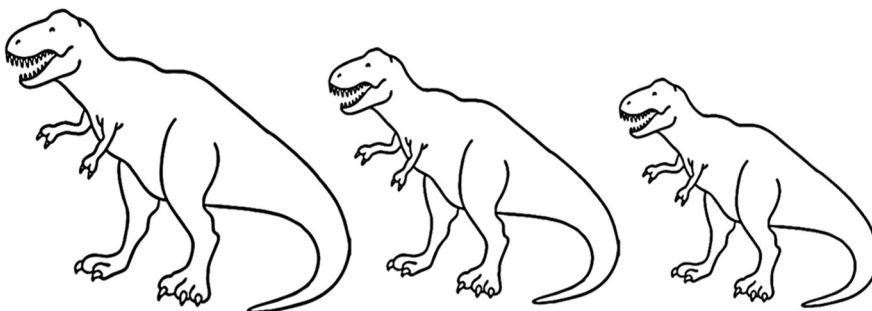


Which sunflower is the tallest?

Which sunflower is the shortest?

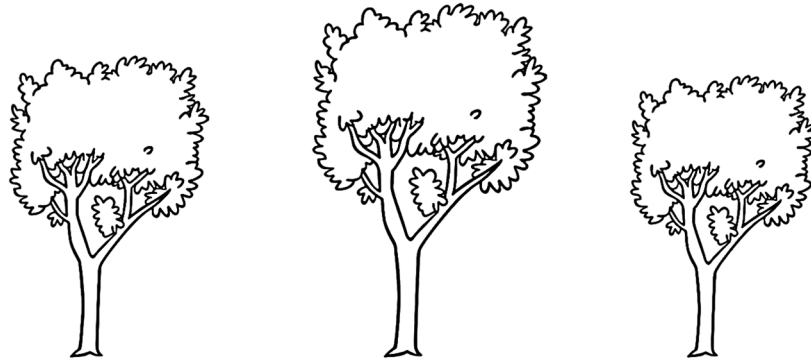
Activity

Colour the tallest dinosaur:



Basic Concepts on Comparison

Colour the tallest tree:



Colour the shortest fairy:

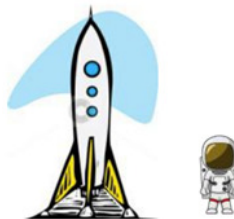


Activity

1. Which is taller?



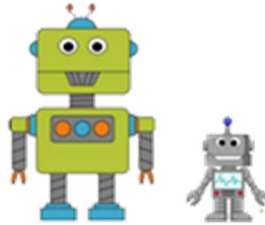
2. Which is shorter?



3. Which is taller?



4. Which is shorter?



5. Which is shorter?



6. Which is taller?



Activity



Basic Concepts on Comparison

Can you find these pictures?

Tall and short



Longer and shorter



High and low



Longest and shortest

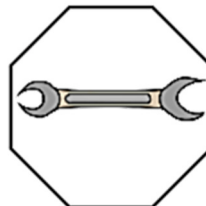


Tallest and shortest



Same and Different

Match the same pictures:



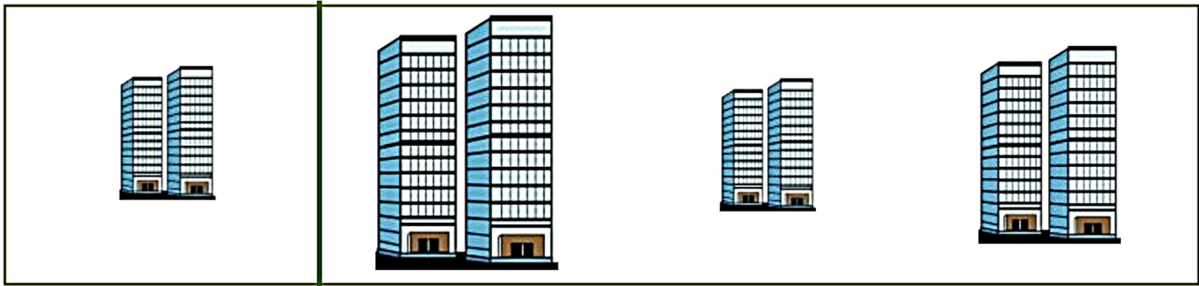
Basic Concepts on Comparison

Choose the picture which is exactly the same as the one given on the left:

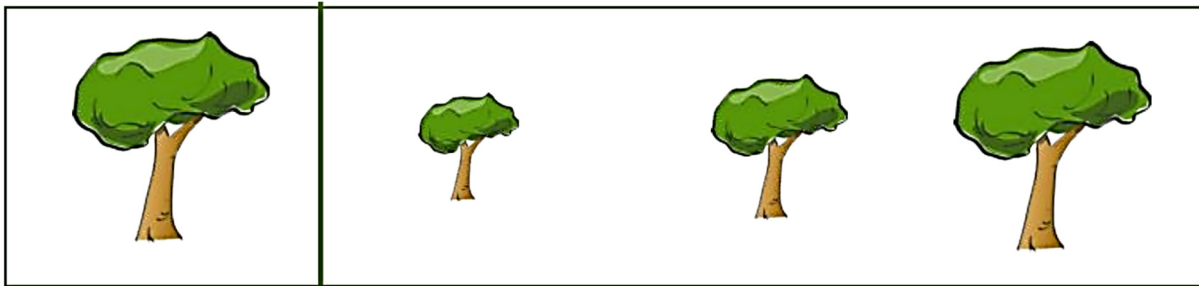
1.



2.

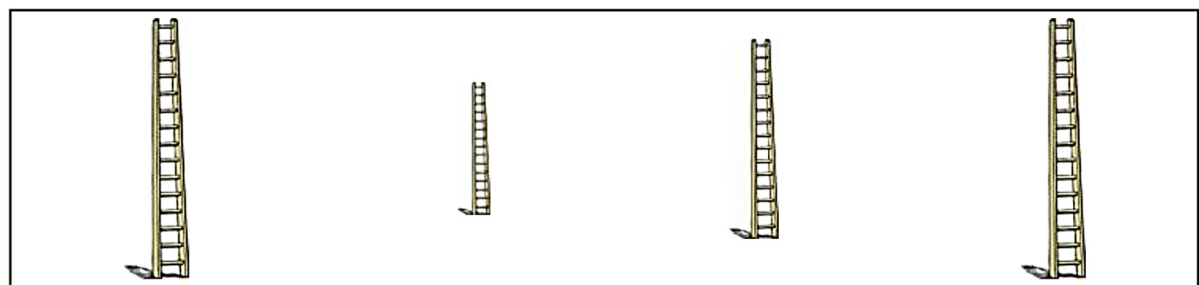


3.

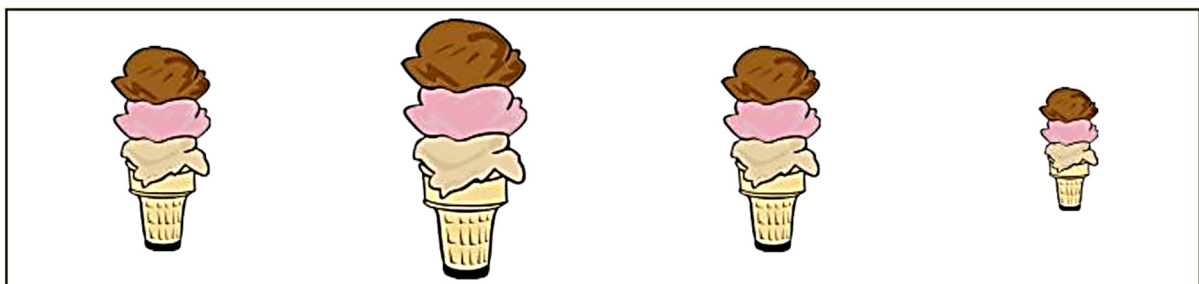


Choose two exactly identical pictures:

1.



2.



Thick and Thin

There are two slices of bread in the figure. The one on the left is the thick one and that on the right is the thin one. The thick bread has more height and width and hence it is said to be thick.

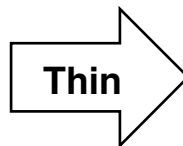
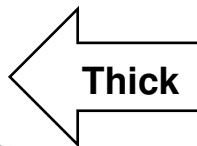
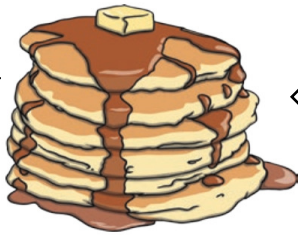


Thick

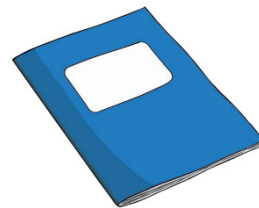
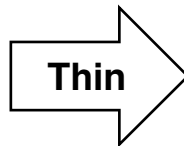
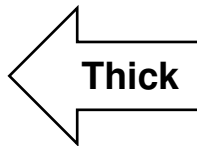


Thin

1.



2.



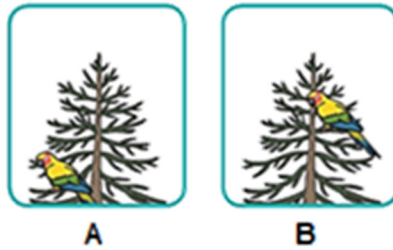
Thick



Thin

Practice Questions

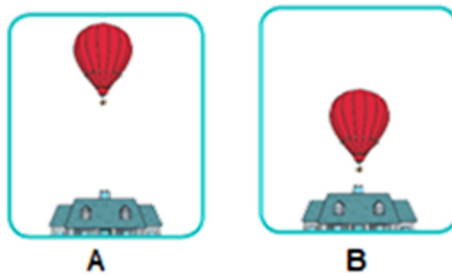
1. Which parrot is the lowest?



a. A

b. B

2. Which hot air balloon is the highest?



a. A

b. B

3. Where is the oval?



a. Bottom

b. Top

4. Where is the octagon?



a. Top

b. Bottom

5. The tree is on the _____.



a. left

b. right

Basic Concepts on Comparison

6. The TV is on the _____.



a. left

b. right

7. The cupcake is on the _____.



a. left

b. right

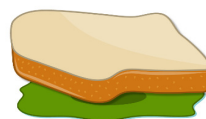
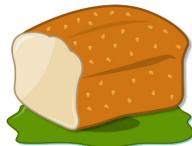
8. The t-shirt is on the _____.



a. left

b. right

9. The thick loaf is on the _____.



a. left

b. right

10. Which glass is empty?



A

B

a. A

b. B

Basic Concepts on Comparison

11. Which plate is full?



a. B

b. A

12. The butterfly is in the _____.



a. right

b. left

13. The rabbit is on _____ of the table.



a. top

b. bottom

14. Which is the tallest ladder?



a. A

b. B

15. The ball is on the _____.

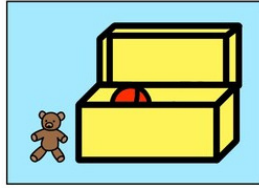


a. left

b. right

Basic Concepts on Comparison

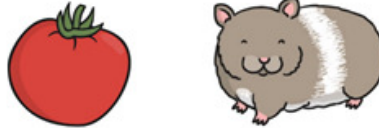
16. The ball is _____ the box.



a. inside

b. outside

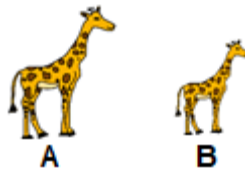
17. The tomato is on the _____.



a. left

b. right

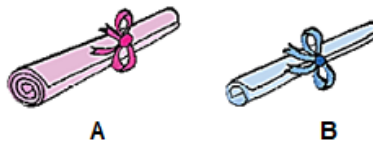
18. Which is the shortest giraffe?



a. A

b. B

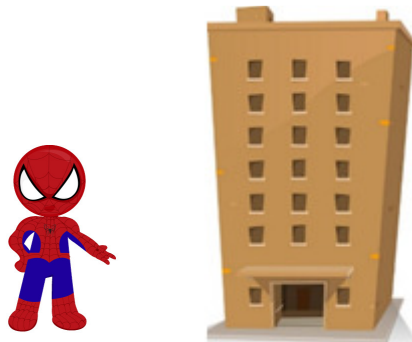
19. Which of them is the thinnest?



a. A

b. B

20. The spiderman is at the _____ of the building.



a. right

b. left