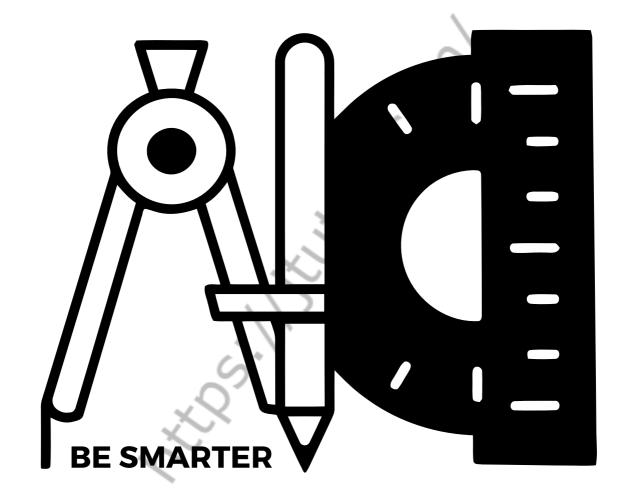
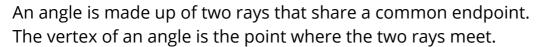
# J-TUTES

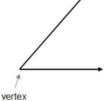


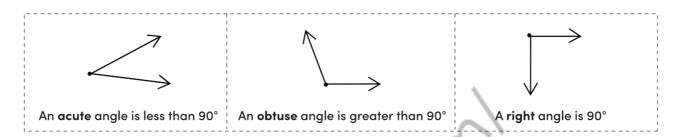
# YEAR 3 WORKBOOK

**TERM 4 SYLLABUS** 

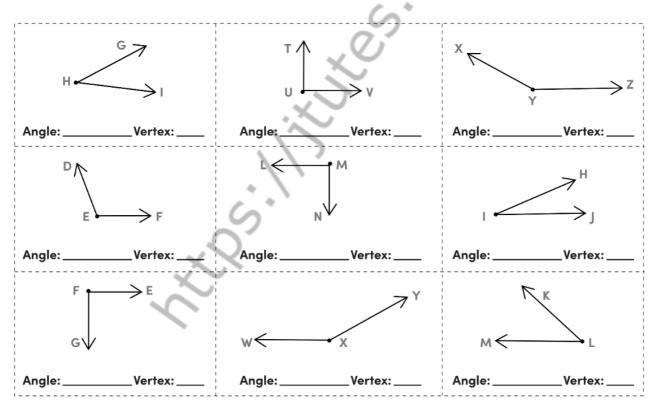
# **Basic Geometry: Anatomy of an Angle**







Directions: Look at each angle and write whether it is acute, obtuse, or right. Then write the letter that represents its vertex.



- 1. An angle measuring less than 90° is called a(n) \_\_\_\_\_ angle.
- 2. An angle measuring exactly 90° is called a(n)\_\_\_\_\_ angle.
- 3. An angle measuring more than 90° is called a(n) \_\_\_\_\_\_ angle.

# **CLASSIFYING ANGLES**

Classify each angle as acute, obtuse, right or straight.

1)	2)	3)
Type :	Type :	Туре :
4)	5)	6)
$\rightarrow$	, , , , , , , , , , , , , , , , , , ,	$\xrightarrow{\hspace*{1cm}}$
Type :	Type :	Type :
7)	8)	9)
Type :	Type :	Type :
10) 49 <sup>0</sup>	11) 82 <sup>0</sup>	12) 180°

Type:\_\_

Type:\_\_

Туре:\_\_\_

# **CLASSIFYING ANGLES**

# Circle the correct names for the following angles.

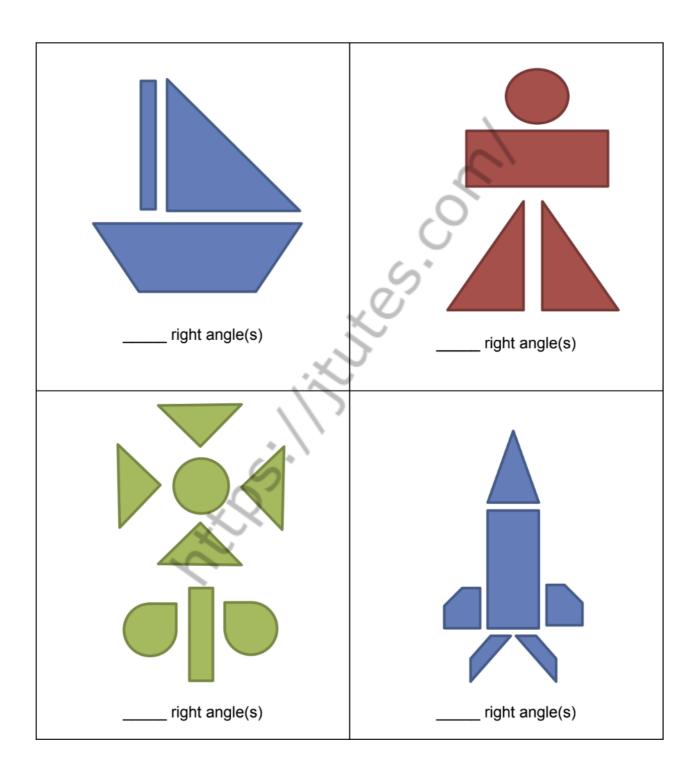
	<b>→</b>			
Right / Obtuse / Acute				
	Tioute Tioute	Sign		
Right / Obtuse / Acute				
<b>\</b>				
Right / Obtuse / Acute			Right / Obtuse /	
		Acute	Acute	
Right / Obtuse / Acute				

# COMPARING ANGLES WITH RIGHT ANGLES Are the following angles are smaller than, larger than or equal to a right angle?

	<b></b>		
Smaller / Larger /			
Right	Right	Right	Right
Smaller / Larger /			
Right	Right	Right	Right
<b>←</b>	S		
Smaller / Larger /			
Right	Right	Right	Right
Smaller / Larger /			
Right	Right	Right	Right

# **IDENTIFYING RIGHT ANGLES**

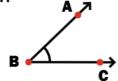
Mark and count the number of right angles in the following figures.

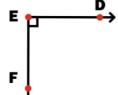


# **THREE TYPES OF ANGLES**

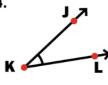
Label each angle as acute, obtuse, or right.

1.

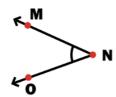


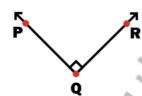


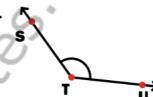


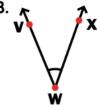


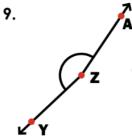
5.



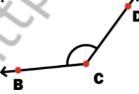


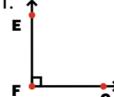


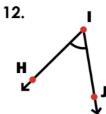




10.



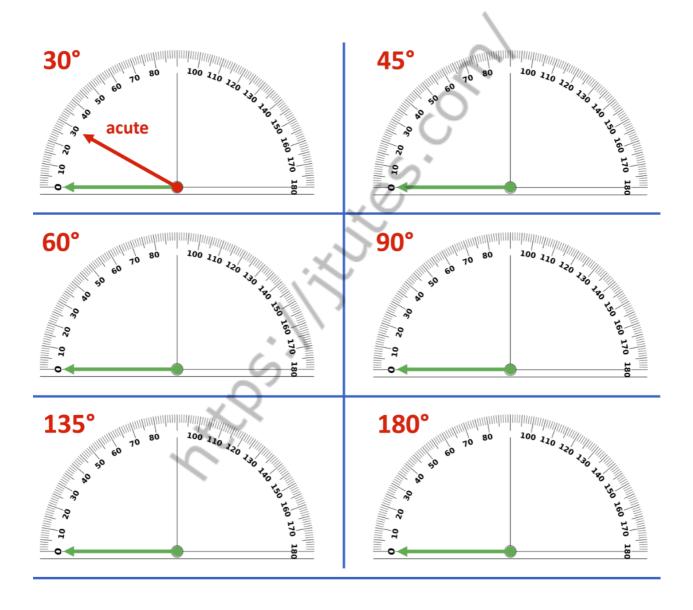




### **DRAWING ANGLES WITH A PROTRACTOR**

The protractors shown below each have a green ray drawn from the bottom center out to the 0° marking. Draw a second ray to create the angle shown in red.

Label each angle as acute, obtuse, right, or straight. The first one has been done for you.



# **MEASURING AND CLASSIFYING ANGLES**

Measure the angles and classify them as "right", "acute" or "obtuse".

2. 3. 1. 5. 4. 6. 7. 9.

# **MEASURING AND CLASSIFYING ANGLES**

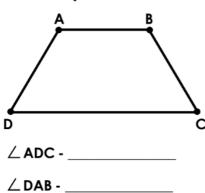
Measure the angles and classify them as "right", "acute" or "obtuse".

1. 2. 3. 5. 6. 4. 7. 9.

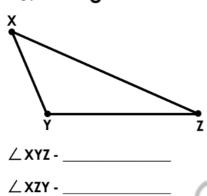
### **TYPES OF ANGLES**

Tell whether each angle is obtuse, acute, or right.

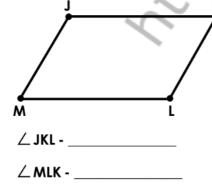
1. trapezoid



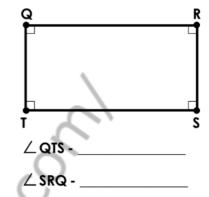
3. triangle



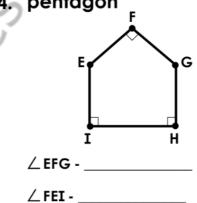
5. parallelogram



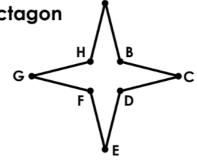
2. rectangle



pentagon



6. octagon



∠ GHA - \_\_\_\_\_ ∠ FED - \_\_\_\_\_

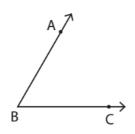
# **FIND THE ANGLES**

Acute Angles Obtuse Angles Right Angles  A B C  A C	Acute Angles	Obtuse Angles	Right Angles	] [
Acute Angles Obtuse Angles Right Angles  D E F G Acute Angles Obtuse Angles Right Angles  Acute Angles Obtuse Angles Right Angles				
Acute Angles Obtuse Angles Right Angles  D E F G Acute Angles Obtuse Angles Right Angles  Acute Angles Obtuse Angles Right Angles				F/ G
Acute Angles Obtuse Angles Right Angles  G B C G B D E				
Acute Angles Obtuse Angles Right Angles  G B C G B D E				
Acute Angles Obtuse Angles Right Angles  G B C G B D E				
Acute Angles Obtuse Angles Right Angles  G B C G B D E				.0
Acute Angles Obtuse Angles Right Angles  G  B  D  E  F  G  B  D  E	Acute Angles	Obtuse Angles	Right Angles	G n
Acute Angles Obtuse Angles Right Angles  G B D E			0	
Acute Angles Obtuse Angles Right Angles  G B D E			70	
Acute Angles Obtuse Angles Right Angles  G B D E			.~	
G B D E				Ď Ě F G
G B D E				
G B D E			7	- Д С
	Acute Angles	Obtuse Angles	Right Angles	] Î
		×Q.		
H F		X		G B D E
F H				
				H F

# **VERTEX & SIDES**

# Name the vertex and sides that form each angle.

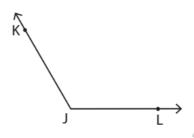
1)



Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

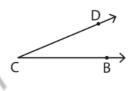
2)



Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

3)



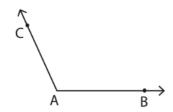
Vertex:

Sides : \_\_\_\_\_

4)

5)

6)



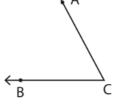
Vertex :

Sides : \_\_\_\_\_

D F

Vertex :

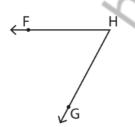
Sides : \_\_\_\_\_



Vertex :

Sides : \_\_\_\_\_

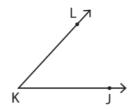
7)



Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

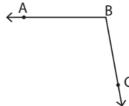
8)



Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

9)



Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

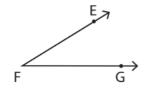
# **VERTEX & SIDES**

# Name the vertex and sides that form each angle.

1)

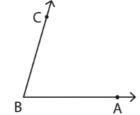
2)

3)



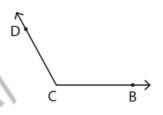
Vertex :

Sides :



Vertex:

Sides:



Vertex:

Sides :

4)

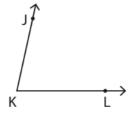
5)



6)

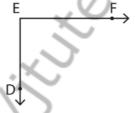
9)





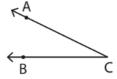
Vertex:

Sides:



Vertex:

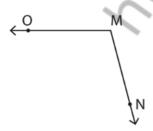
Sides :



Vertex:

Sides:

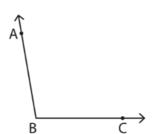
7)



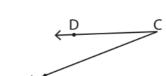
Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

8)



Vertex : \_\_\_\_\_



Sides : \_\_\_\_\_

Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

# **VERTEX & SIDES**

# Name the vertex and sides that form each angle.

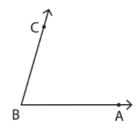
1)



Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

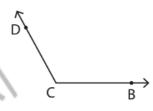
2)



Vertex:\_

Sides: \_

3)



Vertex:\_\_\_\_

Sides : \_\_\_\_\_

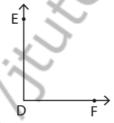
4)



Vertex:

Sides:

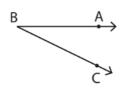
5)



Vertex:

Sides:

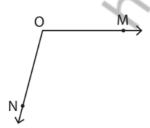
6)



Vertex:

Sides:

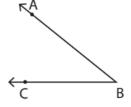
7)



Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

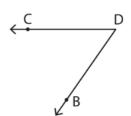
8)



Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

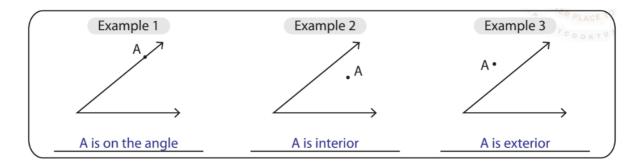
9)



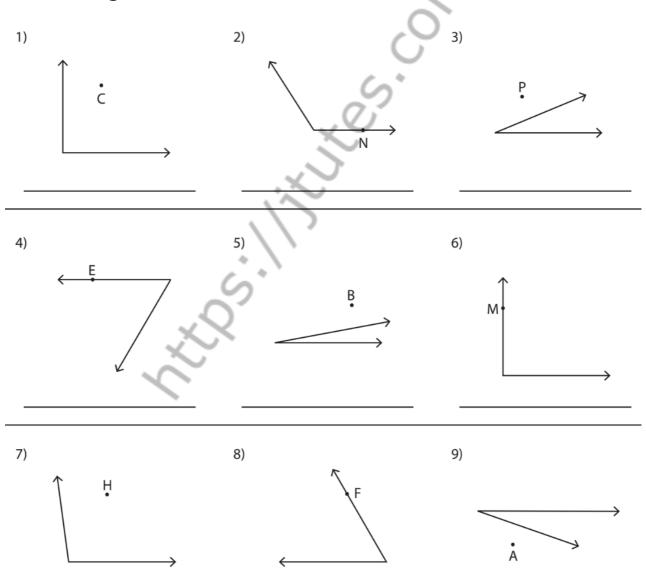
Vertex : \_\_\_\_\_

Sides : \_\_\_\_\_

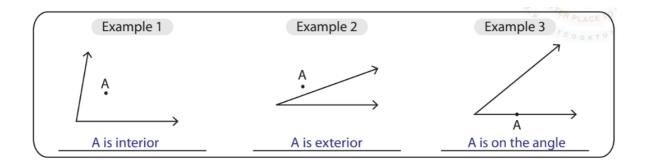
# **POSITION OF POINTS**



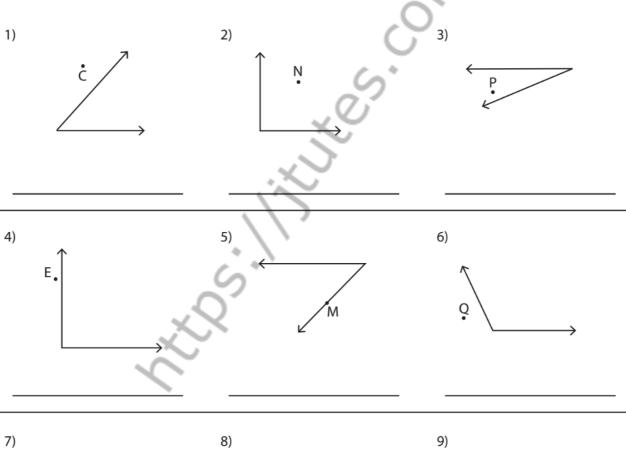
# Identify whether each point is in the interior, exterior or on the angle.

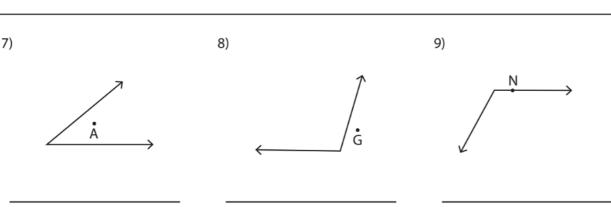


# **POSITION OF POINTS**

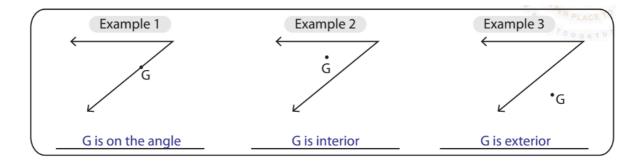


# Identify whether each point is in the interior, exterior or on the angle.

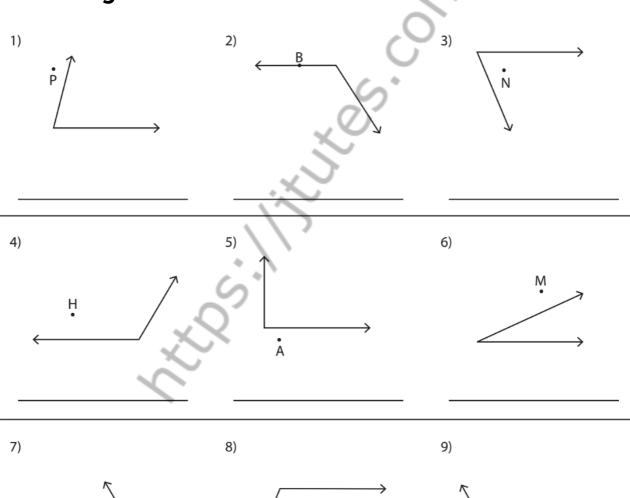


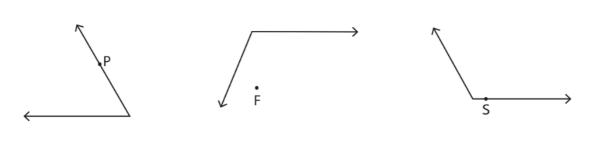


# **POSITION OF POINTS**



# Identify whether each point is in the interior, exterior or on the angle.





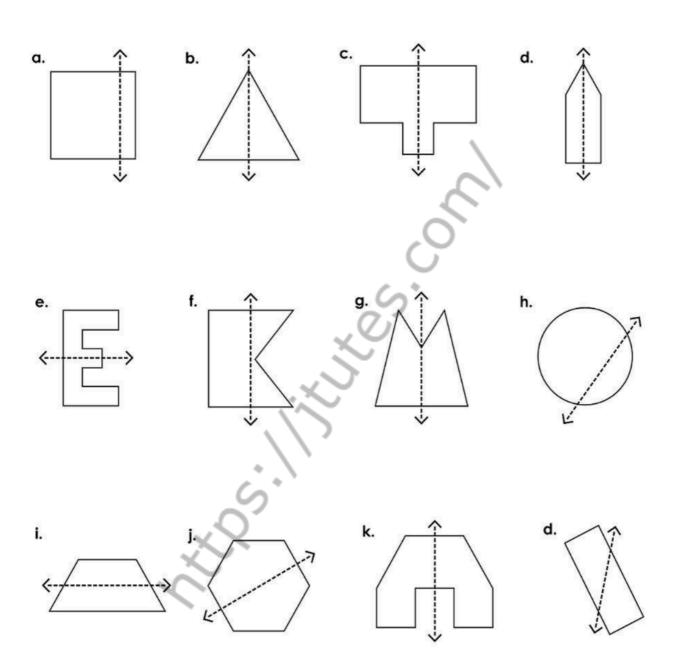
			-0			
			#2			
		-				<b>→</b>
60 degrees	$\circ$	90 degrees	0	60 degrees	\ O	15 degrees
15 degrees	$\circ$	45 degrees	0	90 degrees	0	5 degrees
			#4			
		<b>→</b>	,0	2		
	•		5			
5 degrees	$\circ$	90 degrees	0	15 degrees	$\circ$	90 degrees
60 degrees	$\circ$	30 degrees	0	60 degrees	$\circ$	45 degrees
			#6			
		<b>——</b>				<b>→</b>
60 degrees	$\circ$	15 degrees	0	90 degrees	$\circ$	60 degrees
45 degrees	$\circ$	90 degrees	0	30 degrees	0	5 degrees
	60 degrees 15 degrees What is the meangle? Choose  5 degrees What is the meangle? Choose  What is the meangle? Choose	60 degrees  15 degrees  What is the measure angle? Choose the beautiful to the degrees  60 degrees  What is the measure angle? Choose the beautiful to the degrees  60 degrees  60 degrees	15 degrees	60 degrees 90 degrees 15 degrees 45 degrees  What is the measurement of this angle? Choose the best estimate.  5 degrees 90 degrees 60 degrees 30 degrees  What is the measurement of this angle? Choose the best estimate.	60 degrees 90 degrees 15 degrees 45 degrees  What is the measurement of this angle? Choose the best estimate.  5 degrees 90 degrees 60 degrees 30 degrees  What is the measurement of this angle? Choose the best estimate.  What is the measurement of this angle? Choose the best estimate.  60 degrees 90 degrees 60 degrees  60 degrees 90 degrees 60 degrees  90 degrees 90 degrees 90 degrees 90 degrees	The measurement of this angle? Choose the best estimate.  60 degrees

#7	What is the measurement of this angle? Choose the best estimate.	#8
•		
$\circ$	45 degrees O 90 degrees	○ 5 degrees ○ 60 degrees
$\circ$	30 degrees O 5 degrees	O 30 degrees O 90 degrees
#9	What is the measurement of this angle? Choose the best estimate.	What is the measurement of this angle? Choose the best estimate.
$\circ$	60 degrees O 30 degrees	O 45 degrees O 60 degrees
$\circ$	90 degrees 5 degrees	O 90 degrees O 15 degrees
#11	What is the measurement of this angle? Choose the best estimate.	What is the measurement of this angle? Choose the best estimate.
$\circ$	45 degrees O 15 degrees	O 30 degrees O 60 degrees
0	5 degrees 0 90 degrees	O 90 degrees O 5 degrees

#13	What is the me angle? Choose			#14			
	<u></u>						<b>→</b>
		A			+ \		
0	15 degrees	0	5 degrees	0	60 degrees	0	90 degrees
$\circ$	45 degrees	$\circ$	90 degrees	0	45 degrees	$\circ$	5 degrees
#15	What is the mo			#16	What is the me angle? Choose		
	7		<b></b>	,0			-
	`		(2)	5			
			(/)				
$\circ$	45 degrees	$\circ$	5 degrees	0	30 degrees	$\circ$	60 degrees
$\circ$	15 degrees	$\circ$	90 degrees	0	5 degrees	$\circ$	90 degrees
#17	What is the me angle? Choose			#18	What is the me angle? Choose		
	Y		<b>→</b>		<b>Y</b>		<b>→</b>
		4				l	
0	5 degrees	0	60 degrees	0	5 degrees	0	60 degrees
0	15 degrees	0	30 degrees	0	30 degrees	0	90 degrees

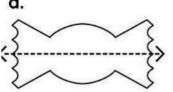
		rement of this best estimate.	#20			
		-	•			
○ 60 de	grees O	90 degrees	0	90 degrees		60 degrees
O 45 de	grees O	15 degrees	0	45 degrees	$\circ$	15 degrees
		rement of this best estimate.	#22	What is the me angle? Choose		
	•					•
○ 30 de	grees O	45 degrees	0	90 degrees	$\circ$	5 degrees
○ 90 de	grees O	60 degrees	0	15 degrees	$\bigcirc$	60 degrees
		rement of this best estimate.	#24	What is the me angle? Choose		
			•-			<b>*</b>
○ 5 deg	rees O	60 degrees	0	5 degrees	$\circ$	60 degrees
O 30 de	grees O	90 degrees	0	45 degrees	0	30 degrees

Tell whether the dotted line on each shape is a line of symmetry. Write yes or no.

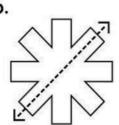


Tell whether the dotted line on each shape represents a line of symmetry. Write yes or no.

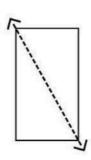
a.

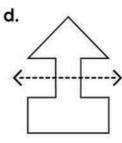


b.



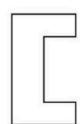
C.



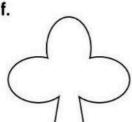


# Draw a line of symmetry on each shape.

e.



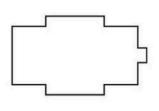
f.



g.

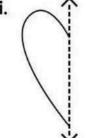


h.



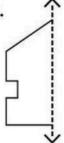
# Draw the second half of each symmetrical shape.

i.

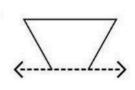




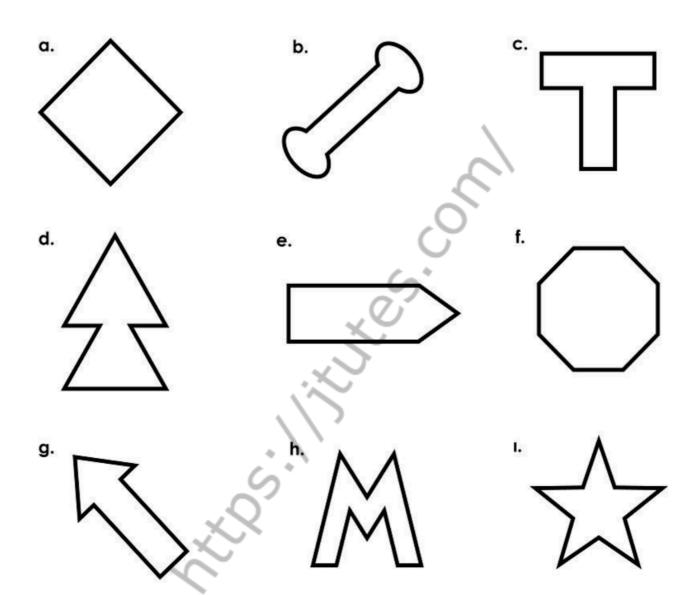
k.



I.

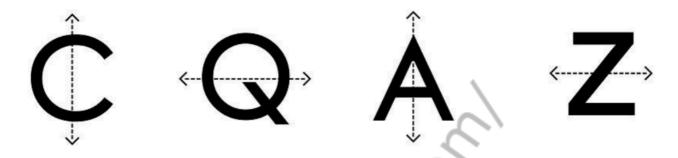


Draw lines of symmetry on the shapes below. Some shapes may have more than one line of symmetry.



### **ALPHABET SYMMETRY**

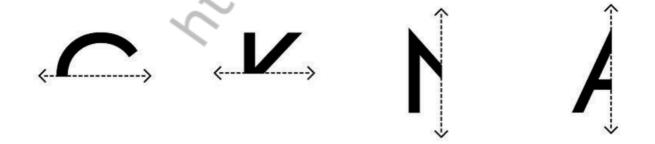
Tell whether the dotted line on each letter represents a line of symmetry. Write yes or no.



Draw a line of symmetry on each letter.

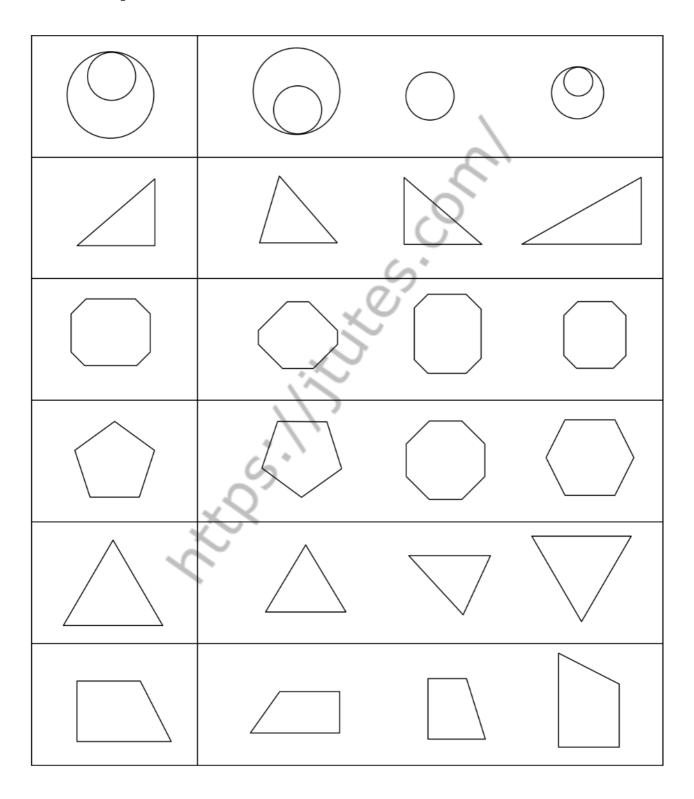


Draw the second half of each symmetrical letter.



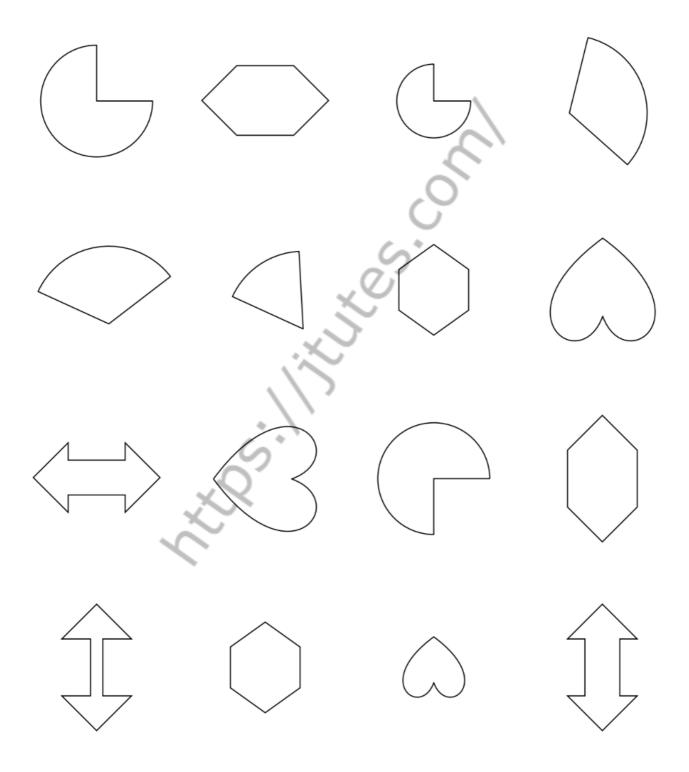
# **CONGRUENT SHAPES**

Circle the shapes on the right that are congruent to the shapes on the left.



# **MATCHING CONGRUENT SHAPES**

Colour the pairs of congruent shapes with the same color.



# **LINES OF SYMMETRY**

Draw the line(s) of symmetry on each shape. If a shape has no lines of symmetry, draw an X through it.



### **LINES OF SYMMETRY**

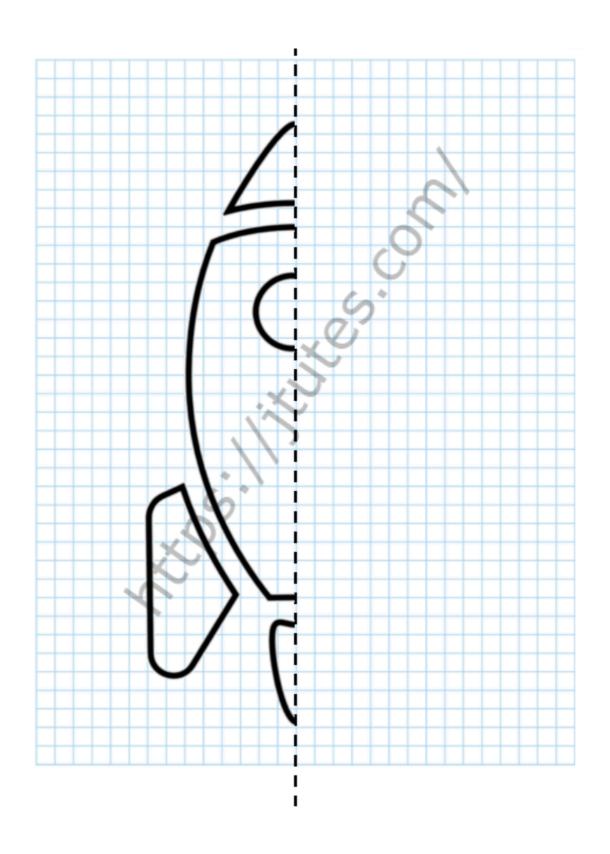
Draw the line of symmetry which cuts the following shapes in half evenly.

Hint: Some shapes can be cut in more than one way.



# **SYMMETRY - A SYMMETRIC ROCKET**

Drawing the other half of this symmetric rocket.



# CHAPTER 4 -TALLY

# **CHAPTER 4 - TALLY**

### **TALLY MARKS**

Count the tally marks. Write the value of each set.

。\_\_\_\_\_ ## ## ## ## ## |

b.\_\_\_\_\_ ### |||

.\_\_\_\_\_ ## ## ## ||||

a\_\_\_\_\_\_ ### ####

Draw tally marks to represent each number.

18 \_\_\_\_\_

9 \_\_\_\_\_

23 \_\_\_\_\_

15 \_\_\_\_\_

#### **PET STORE TALLY**

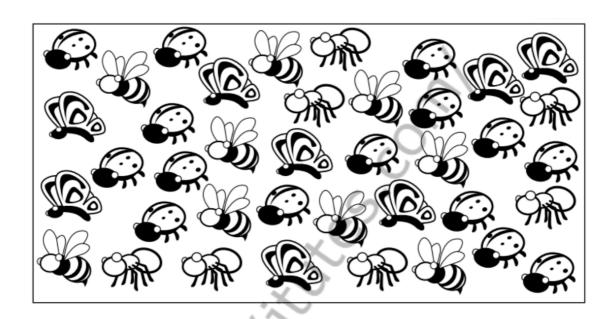
Jose's pet store sells mice, birds, frogs, and fish. The tally chart shows how many of each kind were sold. Use the information from the tally chart to answer the questions.

Pet	Tally Marks
Mice	## ## 116
Bird	##    0
Frog	## ## ##
Fish	## ## ##

1. How many birds were sold?	
2. Which pet sold the most?	
3. How many pet sold in all?	
<b>-</b> -	
4. How many more fish were sold than frogs?	
5. Which type of pet sold 12 times?	

#### **BUG TALLY**

Count the bugs. As you count, cross off each bug in the picture and add a tally mark to the chart. When you're done, write the total number of each bug.



Fruit	Tally Marks	Total
Ladybug	SQ	
Butterfly		
Ant Aff		
Bee Bee		

# **TALLY THE BIRDS**



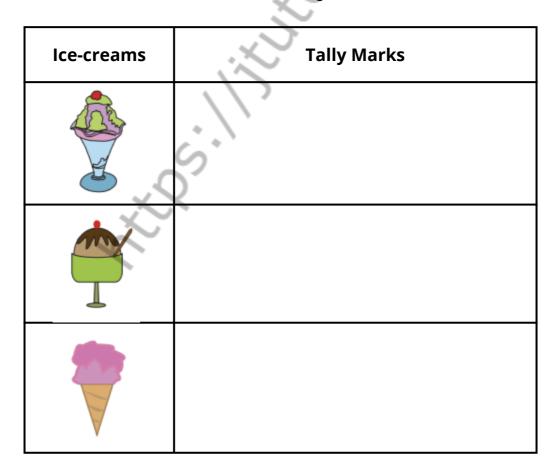
# Count the birds and draw tally marks to show the count.

Birds	Tally Marks

# **CHAPTER 4 - TALLY**TALLY THE ICE-CREAMS

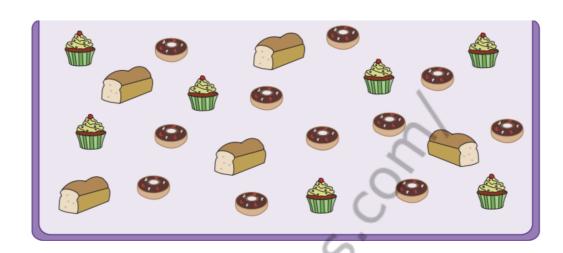


# Count the ice-creams and draw tally marks to show the count.



#### **TALLY - BAKERY**

Kayla and her friends bought some donuts, cupcakes and breads. Draw tally marks to show the number of items in each kind and answer the questions.



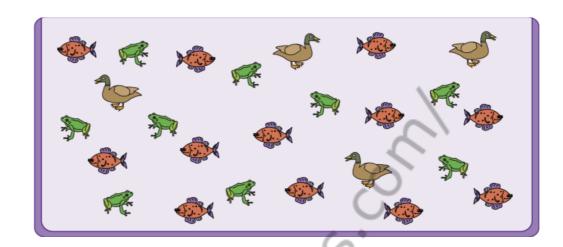
Bakery Items	Tally Marks
Bread	
Donut Donut	5.
Cupcake	2

1) Which item is the fewest in number?	
2) How many more donuts did they buy than cupcakes?	_
3) Which item counts more than 8?	

4) How many items are there in all?

### **TALLY - POND ANIMALS**

Draw tally marks to show the number of pond animals in each kind and answer the questions.



Pond Animals	Tally Marks
Fish	
Duck	Ġ.
Frog	2

1) How many more fish than ducks?	
2) Which kind is the most in number?	
3) How many fewer ducks than frogs?	
4) How many pond animals are there?	

#### **WEEKEND SALE**

Lisa is a small-time entrepreneur; she sells burger, pizza, hot dog and fried chicken. The tally chart shows how many of each kind were sold during the weekends. Use the information from the tally chart to answer the questions.

Food	Items	Tally Marks
	Burger	
	Pizza	
<b>\$</b>	Fried Chicken	THT THT II
(March	Hot Dog	JHT III

1) How many burgers were sold?	,
2) Which item was sold the most?	
3) How many more fried chickens were sol	ld than hot dogs?
4) Which item was sold the least?	
5) How many items were sold in all?	

# **FURNITURE SHOWROOM**

James visited furniture showroom and saw a tally chart with the information about availability of different kinds of furniture. Answer the questions using tally chart.

Furnit	ure	Tally Marks
	Sofa	JHT IIII
	Chair	
	Cot	THT 1
	Table	

1) How many sofas are there?
2) How many cots are there?
3) How many more chairs are there than tables?
4) Which kind is the most available furniture?
5) How many furniture are there in total?

#### TRIP TO ZOO

Mrs. Maria's class went on a field trip to the zoo. She asked the kids to vote for their favorite animal and recorded the results in a tally chart. Use the tally chart to answer the questions.

Animals		Tally Marks
Tiger		
	Giraffe	JHT II
	Elephant	THI
	Deer	JHT JHT I

1) Which animal was favorite for 11 kids?
<sub>v</sub> Q
2) How many more kids voted for tigers than deers?
3) Were there animals with equal votes?
If yes, name the animals.
4) Which animal was most popular?
5) How many kids voted in all?

# **CHAPTER 5 - NAPLAN**

# MATERIAL FOR THIS WEEK WILL BE PROVIDED BY YOUR TUTOR IN THE CLASS

#### **Hours and Minutes**

Example:

2 hours 10 minutes = minutes

1 hour = 60 minutes

2 hours = 2 x 60 minutes = **120 minutes** 

2 hours 10 minutes = **120 minutes** + 10 minutes = **130 minutes** 

#### Convert the following to minutes.

- 1) 3 hours 15 minutes = minutes
- 2) 4 hours 23 minutes = \_\_\_\_ minutes
- 3) 9 hours 10 minutes = minutes
- 8 hours 37 minutes = \_\_\_\_ minutes
- 5) 16 hours 20 minutes = minutes
- 6) 12 hours 55 minutes = minutes
- 7) 7 hours 44 minutes = minutes
- 8) 11 hours 11 minutes = minutes
- 9) 13 hours 55 minutes = minutes
- 10) 6 hours 22 minutes = \_\_\_\_ minutes
- 11) 14 hours 48 minutes = \_\_\_\_\_ minutes
- 12) 2 hours 14 minutes = \_\_\_\_\_ minutes
- 13) 15 hours 24 minutes = \_\_\_\_ minutes
- 14) 10 hours 19 minutes = \_\_\_\_\_ minutes
- 15) 4 hours 39 minutes = \_\_\_\_\_ minutes
- 16) 5 hours 16 minutes = \_\_\_\_\_ minutes

#### **Hours and Minutes**

Example:

2 hours 10 minutes = minutes

1 hour = 60 minutes

 $2 \text{ hours} = 2 \times 60 \text{ minutes}$ = 120 minutes

2 hours 10 minutes = **120 minutes** + 10 minutes = 130 minutes

#### Convert the following to minutes.

- 1) 6 hours 38 minutes = minutes
- 2) 9 hours 12 minutes = minutes
- 3) 12 hours 12 minutes = minutes
- 3 hours 27 minutes = minutes
- 5) 13 hours 20 minutes = minutes
- 6) 16 hours 18 minutes = minutes
- 7) 5 hours 58 minutes = minutes
- 8) 14 hours 21 minutes = minutes
- 2 hours 37 minutes =
- 10) 11 hours 17 minutes = \_\_\_\_\_ minutes
- 11) 8 hours 30 minutes = minutes
- 12) 15 hours 16 minutes = minutes
- 13) 10 hours 29 minutes = minutes
- 14) 4 hours 50 minutes = minutes
- 15) 7 hours 26 minutes = \_\_\_\_ minutes 16) 2 hours 33 minutes = \_\_\_\_ minutes

#### **Hours and Minutes**

Example:

2 hours 10 minutes = minutes

1 hour = 60 minutes

 $2 \text{ hours} = 2 \times 60 \text{ minutes}$ = 120 minutes

2 hours 10 minutes = **120 minutes** + 10 minutes = 130 minutes

#### Convert the following to minutes.

- 1) 4 hours 32 minutes = minutes
- 2) 11 hours 22 minutes = \_\_\_\_ minutes
- 3) 9 hours 54 minutes = minutes
- 4) 14 hours 16 minutes = \_\_\_\_ minutes
- 5) 12 hours 35 minutes = minutes
- 6) 15 hours 12 minutes = minutes
- minutes 2 hours 42 minutes =
- 8) 16 hours 10 minutes = minutes
- 7 hours 11 minutes =
- 10) 13 hours 47 minutes = minutes
- 11) 3 hours 49 minutes = minutes
- 12) 10 hours 12 minutes = minutes
- 6 hours 53 minutes = minutes 13)
- 14) 8 hours 31 minutes = minutes
- 15) 9 hours 17 minutes = minutes 16) 5 hours 18 minutes = minutes

# **Minutes and Seconds**

Example:
10 minutes = \_\_\_\_\_ seconds

1 minutes = 60 seconds

10 minutes = 10 x 60 seconds = **600 seconds** 

Convert the following minutes to seconds	Work space
1) 2 minutes = seconds	0
2) 6 minutes = seconds	S
3) 12 minutes = seconds	5
4) 9 minutes = seconds	
5) 15 minutes = seconds	
6) 4 minutes = seconds	
7) 8 minutes = seconds	
8) 11 minutes = seconds	
9) 16 minutes = seconds	
10) 7 minutes = seconds	

# **Minutes and Seconds**

Example:
10 minutes = \_\_\_\_\_ seconds

1 minutes = 60 seconds

10 minutes = 10 x 60 seconds = **600 seconds** 

Convert the following minutes to seconds	Work space
1) 8 minutes = seconds	0
2) 5 minutes = seconds	S
3) 11 minutes = seconds	
4) 7 minutes = seconds	
5) 3 minutes = seconds	
6) 9 minutes = seconds	
7) 12 minutes = seconds	
8) 14 minutes = seconds	
9) 2 minutes = seconds	
10) 13 minutes = seconds	

# **Minutes and Seconds**

Example:
10 minutes = \_\_\_\_\_ seconds

1 minutes = 60 seconds

10 minutes = 10 x 60 seconds = **600 seconds** 

Convert the following minutes to seconds	Work space
1) 11 minutes = seconds	S
2) 13 minutes = seconds	
3) 4 minutes = seconds	5
4) 2 minutes = seconds	
5) 8 minutes = seconds	
6) 6 minutes = seconds	
7) 15 minutes = seconds	
8) 3 minutes = seconds	
9) 7 minutes = seconds	
10) 14 minutes = seconds	

# **Reading Calendar**

# September 2002

Sunday	Monday	Tuesday	Wødnøsday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30			_(		

1) What is the date 2 weeks and 4 days before September 26?
2) Oliver's birthday is exactly two weeks before Tim's birthday. If Tim's
birthday is on the 19th, when is Oliver's birthday?
3) This September month ends on a Monday. On what day of the week w
the next month begin?
4) Mark visits his son Eric, who is in the boarding school on alternate
Fridays. When will Mark visit him again after 6th September?
5) How many Mondays have even dates and how many Tuesdays have odd dates?

# **Reading Calendar**

# **May 2007**

Sunday	Monday	Tuesday	Wednesday	Thursday	Pridag	Saturday
		1	2 Full moon	3	4	5
6	7	8	9	10 Third quarter	11	12
13	14	15	16 New moon	17	18	19
20	21	22	23 First quarter	24	25	26
27	28	29	30	31 Full moon	)	

1) Full moon appears twice full moon days?	in this May month. What are the dates of the
2) How many days are there	e in between the two full moon days?
3) The moon becomes third day. When does the third	quarter on the eighth day after the full moon Quarter appear?
4) The new moon day is on it appear?	the 16th May. On what day of the week does
5) The first quarter moon ap When does the first quar	ppears exactly seven days after the new moon. rter moon appear?

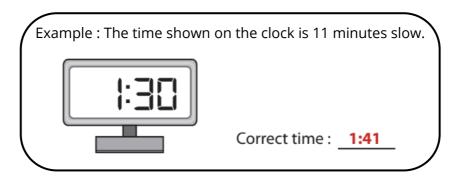
Q.No	Start Time	End Time	Elapsed Time
1)		10:30 A.M.	7 hours
2)		8:30 P.M.	3 hours and 30 minutes
3)		11:00 A.M.	8 hours
4)		6:30 P.M.	4 hours
5)		9:30 A.M.	2 hours
6)		5:30 P.M.	4 hours and 30 minutes
7)		10:30 A.M.	8 hours and 30 minutes
8)		7:30 P.M.	2 hours
9)	5	4:30 A.M.	3 hours
10)	XX	1:30 A.M.	1 hour and 30 minutes
11)		11:00 P.M.	3 hours
12)		11:30 A.M.	2 hours
13)		9:30 P.M.	6 hours
14)		7:30 A.M.	3 hours and 30 minutes
15)		8:30 P.M.	1 hour and 30 minutes

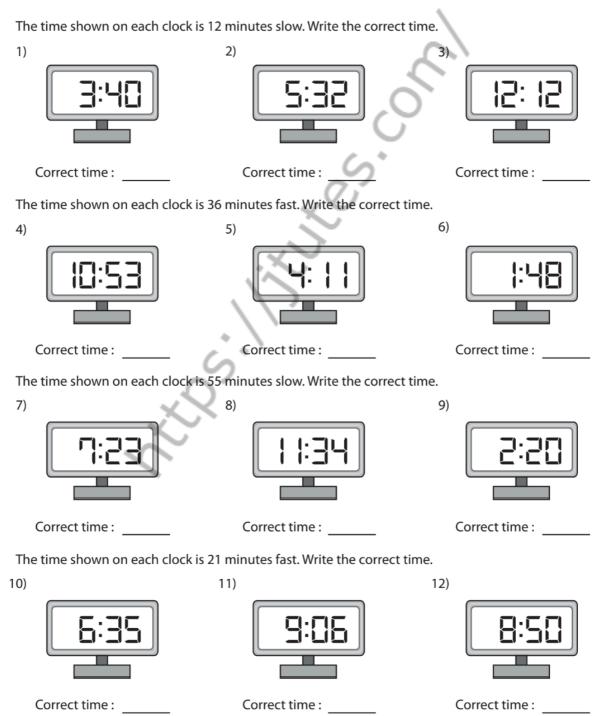
Q.No	Start Time	End Time	Elapsed Time
1)		8:30 A.M.	7 hours and 30 minutes
2)		11:30 P.M.	3 hours
3)		10:30 A.M.	5 hours and 30 minutes
4)		6:30 P.M.	3 hours
5)		8:00 A.M.	5 hours
6)		9:30 P.M.	2 hours and 30 minutes
7)		7:30 A.M.	5 hours
8)	\	10:30 P.M.	9 hours
9)	5	8:30 A.M.	2 hours
10)	××	11:30 A.M.	3 hours and 30 minutes
11)		7:30 P.M.	4 hours
12)		5:30 A.M.	3 hours and 30 minutes
13)		6:30 A.M.	1 hour
14)		10:30 A.M.	8 hours
15)		6:30 P.M.	3 hours and 30 minutes

Q.No	Start Time	End Time	Elapsed Time
1)		8:30 P.M.	13 hours and 30 minutes
2)		9:30 A.M.	16 hours
3)		4:30 P.M.	5 hours and 30 minutes
4)		1:30 A.M.	11 hours
5)		5:30 A.M.	9 hours and 30 minutes
6)		2:30 P.M.	8 hours
7)		12:30 A.M.	2 hours
8)	1	1:00 P.M.	7 hours
9)	5	6:30 A.M.	14 hours
10)	75%	4:30 P.M.	9 hours
11)		2:30 A.M.	12 hours and 30 minutes
12)		5:30 P.M.	8 hours
13)		7:30 P.M.	14 hours and 30 minutes
14)		12:30 A.M.	11 hours
15)		3:00 P.M.	6 hours

Q.No	Start Time	End Time	Elapsed Time
1)		11:30 P.M.	17 hours
2)		3:30 P.M.	10 hours
3)		4:00 A.M.	8 hours
4)		5:00 P.M.	15 hours
5)		4:30 A.M.	8 hours
6)		1:30 P.M.	9 hours
7)		7:30 P.M.	10 hours and 30 minutes
8)		8:30 A.M.	18 hours
9)	5	9:30 A.M.	20 hours and 30 minutes
10)	XX	6:30 P.M.	15 hours
11)	(	11:30 P.M.	13 hours and 30 minutes
12)		7:30 A.M.	18 hours
13)		5:30 P.M.	11 hours and 30 minutes
14)		2:30 P.M.	7 hours and 30 minutes
15)		2:30 A.M.	3 hours

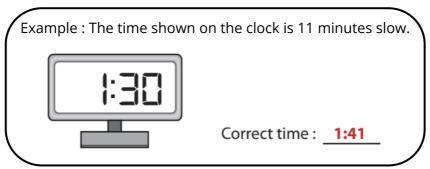
#### **FAST & SLOW CLOCKS**

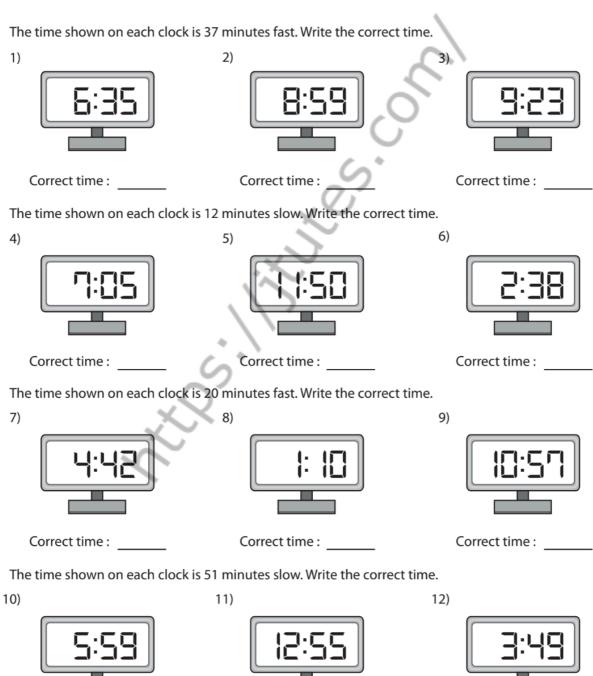




Correct time : \_\_\_\_\_

#### **FAST & SLOW CLOCKS**

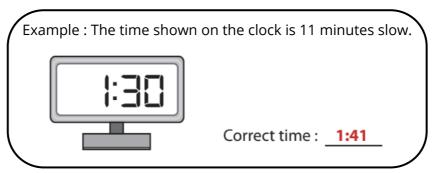


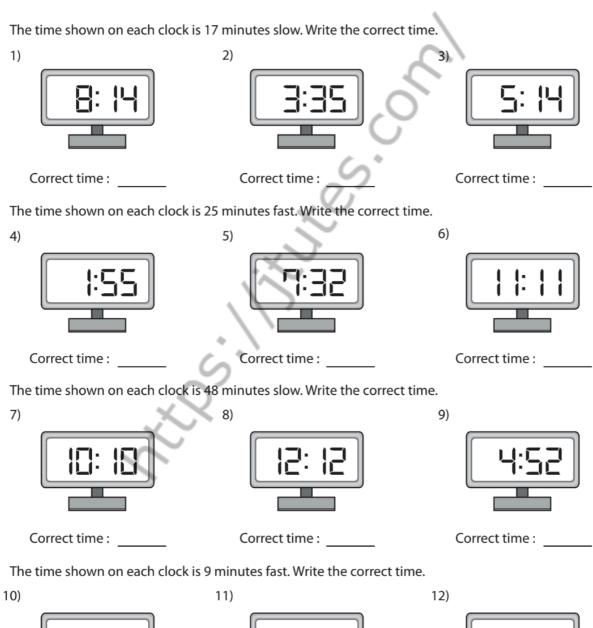


Correct time : \_\_\_\_\_

Correct time : \_\_\_\_

#### **FAST & SLOW CLOCKS**







# **Days and Hours**

Example:
6 days = \_\_\_\_\_ hours

1 day = 24 hours
6 days = 6 x 24 hours
= 144 hours

Со	nvert the following da	ys to hours	Work space
1)	3 days =	hours	50
2)	9 days =	hours	5.
3)	11 days =	hours	
4)	7½ days =	hours	
5)	4 days =	hours	
6)	10 days =	hours	
7)	2 days =	hours	
8)	5½ days =	hours	
9)	8 days =	hours	
10)	12 days =	hours	

# **Days and Hours**

Example:
6 days = \_\_\_\_\_ hours

1 day = 24 hours
6 days = 6 x 24 hours
= 144 hours

Convert the following da	ys to hours	Work space
1) 14 days =	hours	0
2) 8 days =	hours	S
3) 4 days =	hours	
4) 13½ days =	hours	
5) 2 days =	hours	
6) 7 days =	hours	
7) 9½ days =	hours	
8) 15 days =	hours	
9) 3 days =	hours	
10) 5 days =	hours	

# **Days and Hours**

Example:
6 days = \_\_\_\_\_ hours

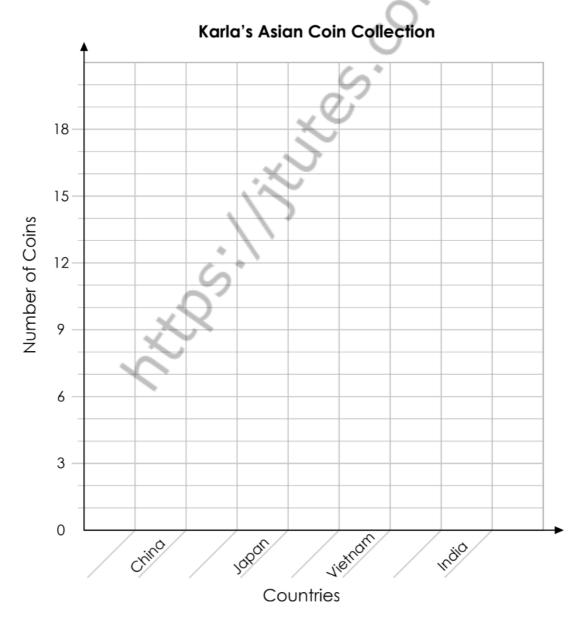
1 day = 24 hours
6 days = 6 x 24 hours
= 144 hours

Convert the following da	ays to hours	Work space
1) 15 days =	hours	
2) 10½ days =	hours	5.
3) 5 days =	hours	
4) 12 days =	hours	
5) 3 days =	hours	
6) 14 days =	hours	
7) 2½ days =	hours	
8) 4 days =	hours	
9) 11 days =	hours	
10) 8 days =	hours	

### **Bar Graph of Coins**

Karla collects coins from Asian countries. The table below shows how many coins she has collected from four different countries. Use the information in the table to complete the graph.





# Bar Graph of Coins Use the bar graph you made to answer the questions.

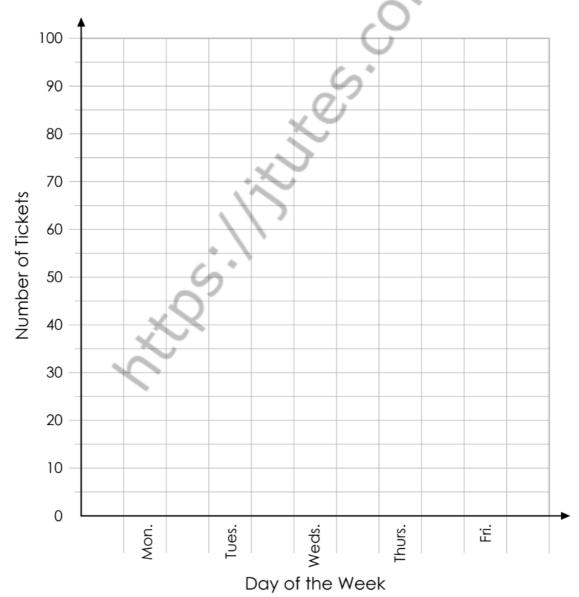
1.	How many more coins does Karla have from China than Vietnam?
2.	How many fewer coins does Karla have from India than Japan?
3.	How many total coins does Karla have from these four countries?
4.	What is on the x-axis of this graph?
5.	What is on the y-axis of this graph?
	Karla's grandmother sends her seven more coins from China. How many Chinese coins does she have now?
	Karla's older sister sent her 23 more coins from Vietnam. How many Vietnamese coins does she have now?
	Karla traded coins with her friend Patty. She gave Patty three of her Indian coins and Patty gave Karla two more Japanese coins.
	How many Indian coins does Karla have now?
	How many Japanese coins does Karla have now?

# **Bar Graph of Ticket Sales**

Esther's school sold raffle tickets last week. The table below shows the number of tickets sold each day. Use the information in the table to complete the graph.

Mon.	Tues.	Weds.	Thurs.	Fri.
55	40	25	35	80

#### Esther's Daily Raffle Ticket Sales



# Bar Graph of Ticket Sales Use the bar graph you made to answer the questions.

1. How many tickets were sold on Monday?
2. How many tickets were sold on Thursday?
3. On which day were the most tickets sold?
4. On which day were the fewest tickets sold?
5. What is on the y-axis of this graph?
6. What is on the x-axis of this graph?
7. How many tickets were sold after Tuesday?
8. How many tickets were sold before Thursday?
9. During which two day period were 115 tickets sold? ——————
10. How many fewer tickets were sold on Wednesday than Thursday?

# **Popcorn Sales Pictograph**

Four Boy Scouts sold popcorn for one month. The list below shows how much money was collected by each Boy Scout.

John - \$75 Logan - \$30 Carter - \$60 Andrew - \$45

# Use the information from the list to complete the pictograph below and answer the questions.

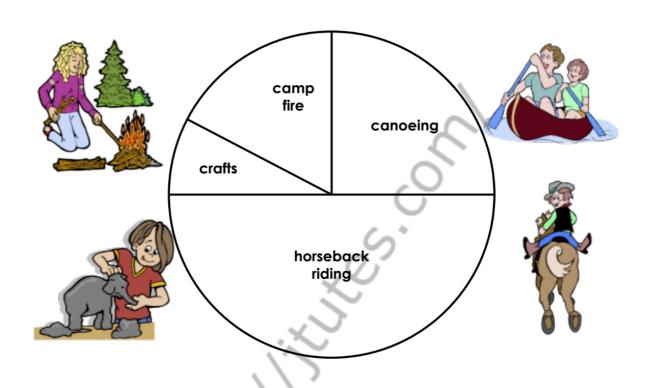
Name	Money Collected
John	
Carter	
Logan	
Andrew	

KEY
Each (\$) = 5 dollars

- 1. How much money did the boys collect in all?
- 2. How much more money did Carter collect \_\_\_\_\_\_ than Andrew?
- 3. Which two boys sold a total of \$120 of popcorn? \_\_\_\_\_
- 4. Who sold more popcorn than Logan, but less \_\_\_\_\_\_ than Carter?

# **Summer Camp Activites**

A group of kids spent a week at Big Tree Summer Camp. At the end of the week, the counselors asked campers what their favorite part of camp was. The pie graph shows their responses.

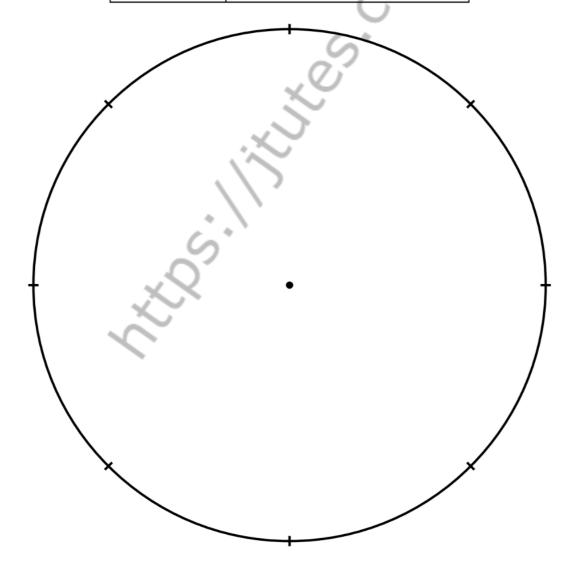


- 1. What activity did campers enjoy the most? \_\_\_\_\_\_
- 2. What fraction of the campers chose canoeing as their favorite activity?
- 3. What fraction of the campers chose horseback riding as their favorite activity? \_\_\_\_\_\_
- 4. Did more campers choose camp res or crafts as their favorite activity?\
- 5. Was camp re or canoeing more popular with the campers?

# **Favorite Sports Graph**

Patty surveyed her friends to find out their favorite sports. The table shows the results. Make a circle graph using the information in the table.

football	##	##	
baseball	$\int \int \int$		
tennis	IJ		
basketball	##	##	## ##
hockey	##		`O.



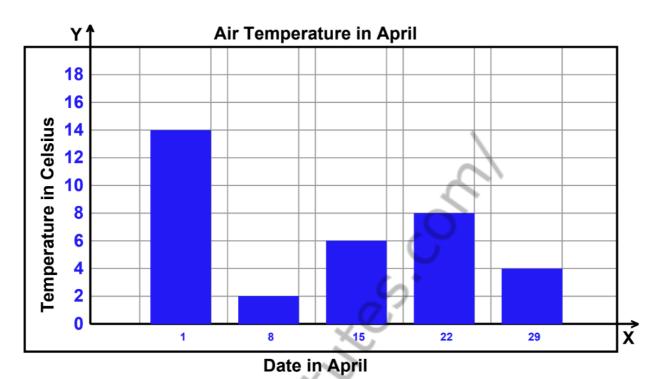
# Favorite Sports Graph

Use the circle graph you made to answer the questions.

1. V	What fraction of Patty's friends said football was their favorite sport
2. V	What fraction said hockey was their favorite sport?
- 3. F	How many more people chose basketball than tennis?
- 4. <i>F</i>	About one half of Patty's friends chose which sport?
- 5. <i>A</i>	About one quarter of Patty's friends chose which sport?
6. V	What fraction of Patty's friends chose baseball or tennis?
7. V	What fraction of Patty's friends chose football or basketball?
_	

# **READING BAR GRAPHS**

# Answer the following questions based off the bar graph.



What was the air temperature on 8?

What was the air temperature on 1?

Did the temperature increase or decrease between

April 15 and April 22?

Was the temperature higher on 29 or 15?

On what date was the temperature at the highest?

# **Birdwatching Pictograph**

Pat, Jim, Linda, and Paul went on a bird watching walk. The pictograph below shows how many birds each person saw.

### **Birdwatching Trip**

Name	Number of Birds Seen			
Pat				
Jim				
Linda				
Paul				

Each 🕻 represents 2 birds

1.	How many birds did Pat see?	1
2.	How many birds did Jim see?	2
3.	How many birds did Paul see?	3
4.	How many more birds did Paul see than Linda?	4
5.	How many birds did Jim and Pat see together?	5
6.	Did Jim see an odd or even number of birds?	6
7.	Who saw eleven birds?	7
8.	If Jim had seen three more birds, how many symbols	_
	would be next to his name on the pictograph?	8
9.	Who saw fewer birds: Jim or Paul?	9
10	Did Linda see more or less than a dozen birds?	10
11	Tell how you would show 4 birds on the pictograph?	
	11	
12	What is the total number of birds seen by the 4 people?	12

# **The Cupcake Bakery**

The Cupcake Bakery makes cupcakes and ships them off to supermarkets across the country. The pictograph below shows how many cupcakes they bake each day. Use the information from the graph to answer the questions.

### **Number of Cupcakes Baked**

Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

	= 100 cupcakes	
--	----------------	--

1.	How many cupcakes were baked on Monday?	1.	
2.	Were more cupcakes baked on Monday or Friday?	2.	
3.	On which day were the fewest cupcakes baked?	3.	
4.	How many cupcakes were baked on Tuesday and Wednesday combined?	4.	
5.	How many more cupcakes were baked on Tuesday than Thursday?	5.	
6.	How many more cupcakes were baked on Friday than Wednesday?	6.	
7.	The Cupcake Bakery only makes two kinds of cupcakes: chocolate and white. On Friday, they baked 200 white cupcakes. How many chocolate cupcakes did they bake?	7.	
8.	On Wednesday, the bakery made 100 chocolate cupcakes. How many white cupcakes did they make?	8.	

# **Fishing Trip Pictograph**

Michael, Emily, Jose, Jennifer, and Kevin went on a fishing trip. The pictograph below shows how many fish each caught. Use the pictograph to answer the questions.

### **Number of Fish Caught**

Michael	time time
Emily	the time the time the
Jose	The trans
Jennifer	tions time time time time
Kevin	time time

|--|

[/]	
1. How many fish did Michael catch?	1
2. How many fish did Emily catch?	2
3. How many fish did Kevin catch?	3
4. How many more fish did Emily catch than Jose?	4
5. How many fish did the girls catch?	5
6. How many fish did boys catch?	6
7. How many more fish did the girls catch than the boys?	7
8. How many fish did Jose and Kevin catch?	8
9. Find the sum of the fish caught by all five people?	9
10. Who caught fewer fish, Jennifer or Emily?	10
11. Did Jennifer catch an odd or even number of fish?	11
12. Jose said, "I caught a dozen fish!" Is he correct? Explain.	12

# **Lemonade Stand Picture Graph**

Doreen was having a lemonade stand in her front yard. The picture graph below shows how much she earned.

### **Lemonade Stand Profits**

Day	Money Earned							
Friday	\$	\$	\$	\$	\$			
Saturday	\$	\$	\$	\$	\$	\$	\$	
Sunday	\$	\$	\$					
Monday	\$	\$						0

\$ = five dollars

	/ a*	
1.	How much money did Doreen earn on Friday?	1
2.	How much did she earn on Sunday?	2
_	Harrison and the same of the s	
3.	How much money did she earn on Saturday and Sunday?	3
4.	How much more did Doreen earn on Saturday	4.
	than Friday?	<b>4.</b>
5.	On which day did Doreen earn the least money?	5
6.	Which day did Doreen earn the most money?	6
7.	How much more did Doreen earn on Saturday than Monday?	7.
	than Plonday:	/·

# **The Pumpkin Carving Contest**

Monica, Wayne, Kiersten, and Derrick were in a pumpkin carving contest.

There was a prize for the person who carved the most pumpkins.

### **Number of Pumpkins Carved**

Monica				
Wayne				<b>d</b>
Kiersten				0
Derrick				

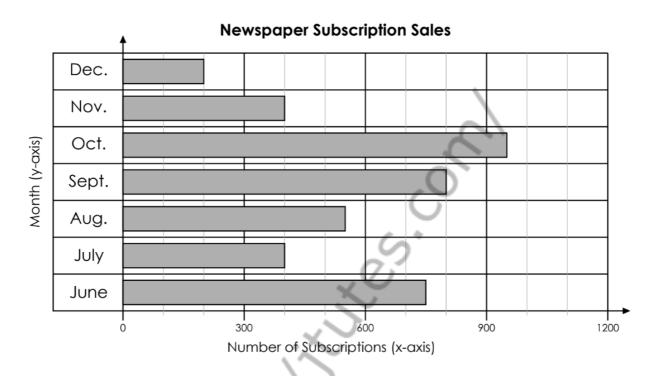
= 4 pumpkins

V /	
1. How many pumpkins did Monica carve?	1
2. How many pumpkins did Wayne carve?	2
3. How many pumpkins did Kiersten carve?	3
4. How many pumpkins did Derrick carve?	4
5. How many more pumpkins did Derrick carve than Kiersten?	5
6. How many pumpkins did Monica and Wayne carve in all?	6
7. Which person carved the greatest number of pumpkins?	7
8. Which person carved the least number of pumpkins?	8
9. If Kiersten carved 4 more pumpkins, how many pumpkins would she have carved in all?	9
10. If Monica had carved 6 fewer pumpkins, how many would she have carved?	10
11. How many more pumpkins did Wayne carve than Monica?	11.
12. How many numbins did the 4 contestants carve altogether?	12.

# **Newspaper Bar Graph**

The local newspaper keeps track of how many subscriptions are sold each month.

Use the graph below to answer the questions.

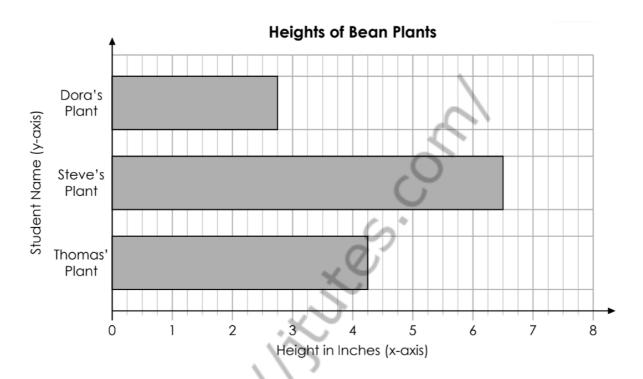


- 1. How many newspaper subscriptions were sold in October?
- 1. \_\_\_\_\_
- How many more newspaper subscriptions were sold in November than December? (Show your work in the space below.)
- 2. \_\_\_\_\_
- 3. Were more newspaper subscriptions sold in October, November, and December, or in July, August, and September? (Show your work in the space below.)
- 3.

- 4. In April, the newspaper sold 100 fewer subscriptions than they did in June. How many supscriptions did they sell in April?
- 4. \_\_\_\_\_

# **Bean Plant Bar Graph**

The students in Mr. Suess' class planted lima bean seeds. After two weeks, the students measured the height of their bean plants and graphed the results.



- 1. Write the height of each student's plant at the end of each bar.
- 2. How much taller did Thomas' plant grow than Dora's?
- 2.

3. How much shorter is Thomas' plant than Steve's?

- 3. \_\_\_\_\_
- 4. If Steve's plant had only grown half as tall, what would its height be?
- 4. \_\_\_\_\_
- 5. Thomas said to Dora, "My plant is twice as tall as yours." Is he correct? 5. \_\_\_\_\_\_\_ Explain.

**CHAPTER 11 - ICAS** 

# MATERIAL FOR THIS WEEK WILL BE PROVIDED BY YOUR TUTOR IN THE CLASS