



Name: ..... **Key**.....

Remedial worksheet

Date: .....

Grade 6 CS all sections

**Objectives:**

To choose the type of graph according to the data provided.

To write a proper hypothesis and identify the dependent and the independent variables for different investigations.

**Question 1 :**

In each of the following statements you have to decide what sort of graph (line or bar) you will use.

- 1) A cyclist is photographed every 2 seconds as he cycles along a track. The lines on the track show the distances. These data are displayed in the table below.

Time	Distance
0	0
2	12
4	24
6	36
8	48

- Type of graph \_\_\_ **Line graph** \_\_\_\_.

- 2) The number of students preferring different ice cream flavors.

Ice cream flavors	Number of students
Strawberry	5
Vanilla	2
Chocolate	4
Oreo	10

- Type of graph \_\_\_ **Bar chart** \_\_\_\_.

- 3) Which is the best type of graph to show the number of people in four different towns? \_\_\_ **Bar chart** \_\_\_\_.

- 4) A Graph to show the change of temperature over the month?

\_\_\_\_\_ **Line graph** \_\_\_\_\_.



## **Question 2:**

Remember that:

**A hypothesis** is a uncertain statement about the relationship between two or more variables. It is a specific, testable prediction about what you expect to happen in a study. A hypothesis does not have to be correct.

Example:

- Students who eat breakfast will perform better on a math exam than students who do not eat breakfast.
  
- State a proper **hypothesis** for the following investigations and identify the dependent and the independent variables:

a) A study is taking place to see what effect does reading have on students' performance in all subjects.

**The hypothesis:** -Reading affects students' performance in all subjects.

-Students who read more perform better in all subjects.

**The independent variable:** \_\_\_\_\_ Reading \_\_\_\_\_.

**The dependent variable:** \_\_\_\_\_ Students performance in all subjects \_\_\_\_\_.

b) Counselors are conducting a study to determine if the time spent on video games has an effect on students' anxiety level.

**The hypothesis:** -The time spent on video games affects students' anxiety level.

- Students who spend more time on video games have higher anxiety level.

**The independent variable:** \_\_\_Time spent on video games\_\_\_\_\_.

**The dependent variable:** \_\_\_\_\_Students anxiety level\_\_\_\_\_.

c) Students are carrying an investigation to show if the amount of electrical energy supplied to an electric motor affects the speed it turns?

**The hypothesis:** -The amount of energy supplied to an electric motor affects the faster it turns.

- The more electrical energy supplied to an electrical motor the faster it turns.

**The independent variable:** \_\_\_Amount of electrical energy supplied\_\_\_\_\_.

**The dependent variable:** \_\_\_\_\_turning speed\_\_\_\_\_.