

The National Orthodox School/ Shmaisani

Subject: Science/ Physics

Grade 6 CS all sections

Name: Key.....

Remedial worksheet

Date:

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.
- Type of graph ____Line graph_____.

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

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

- Type of graph	Bar chart
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Ice cream
flavorsNumber
of
studentsStrawberry5Vanilla2Chocolate4Oreo10

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?













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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 _____.