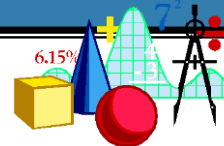


Mathematics, Grade 8

Unit XII: Lesson 7

Brochure: **Investigation – A New Refrigerator**



Review the formula for calculating kilowatts of power usage. Be able to read your electric meter and the monthly electric bill.

Select a major electrical energy-consuming appliance in your home. Calculate the kilowatt usage of this appliance for a fixed period of time (see Unit XII: Lesson 5). Keep track of the approximate amount of time this appliance is drawing electricity over a fixed period of time. Use this information to estimate the usage over a period of one month, and calculate the approximate running cost for one month.

Compare the energy consumption and the cost of electricity of your appliance with that of a new one. Visit an appliance or department store and research the manufacturer's claims concerning energy consumption as posted on new appliances. Calculate the approximate cost of running this appliance for one month based on the same criteria as your old appliance. Calculate the yearly savings and the amount of time required for the savings to equal the cost of a new appliance.

Create an attractive brochure that could be used by an appliance store to market their product. Include your data and calculations. Share your brochure with your parents and teacher. An appliance store may be interested in it too.