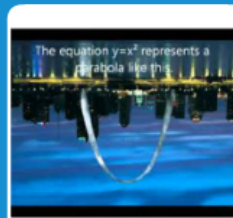# TIMELINE

ImagineIT

By: Irena Kania

Infographic

Research at least 2 cultures that created pyramid

Parabolas All Around

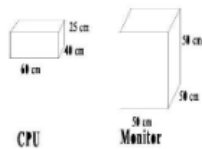Students take pictures of 3 parabolas around them.

The equation $y=x^2$ represents a parabola like this

Geometry

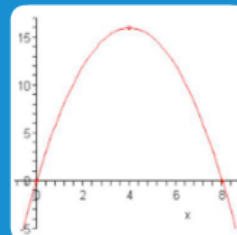Applying trigonometric ratios, sine and cosine law

Bytes In A Box

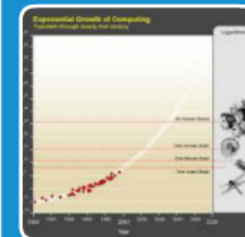Stack boxes with minimal wasted space

CPU   Monitor

Parabolas All Around

Students trace their pictures on the graph paper

Growth or Decay

Students will choose and investigate exponential

TIMELINE

ImagineIT

By: Irena Kania

Items:

○ **Geometry**

Find unknown distances, heights, angles and the area of the triangle created by three pyramids. Transform informations from 3-D solid figures into 2-D diagram.

○ **Infographic**

From the given list choose at least 2 cultures. Then answer the following questions: Who? What? (kind of pyramids) Why? and How? (How did they use it, why did they build it? How did they build it?

○ **Bytes In A Box**

Students will stack boxes of computers and monitors with minimal wasted space using concepts of area and volume. They will draw the storage unit and calculate maximum number of computer systems stored

○ **Parabolas All Around**

In addition they find one picture of well known structure with parabola.

○ **Parabolas All Around**

Trace two of your pictures (one well known) on the graph paper. Create clearly labeled table and mark 5 points. Then calculate equation of the parabola using calculator. Show your function fits .

○ **Growth or Decay**

Students choose topic from a list provided. They investigate how this topic is exponential. They include equation, table, graph. Then, they make prediction for the future.