Hot Stuff

WHICH SURFACE ABSORBS HEAT THE BEST?

Problem

Which surface absorbs heat the best: white-painted, black-painted or mylar-covered?

Research

Answer the following True or False questions:

True/False	A white object reflects many colors.
True/False	A yellow object reflects all colors except for yellow.
True/False	The more energy an object reflects, the hotter it becomes.
True/False	Light shining on an object will warm it because of conduction.

Identification of Variables

Identify the Independent Variable, Dependent Variable, Constants and Control of this experiment:

Independent Variable	
Dependent Variable	
Constants	
Control	

Hypothesis

If white-painted, black-painted and mylar-covered surfaces are heated, then

Conclusion

Complete the conclusion statement after collecting and analyzing the data.

THE SURFACE WHICH ANSORNS HEAT THE REST IS

Data Collection and Analysis

Directions: Record the temperature inside each pipe **every thirty seconds** over the course of four minutes. Once all of the data has been collected, make a **line graph** for each of the different pipes that shows how its temperature changed. You will need to make a symbol for each of the different pipes so that you will be able to tell them apart on the graph.

SURFACE	(initial TEMPERATURE inside of pipe at TIME (minutes:seconds)								
JUNIACL	0:00	0:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00

Hot Stuff Data Chart



