

Dear _____ (Names of two classmates)

(name of other solar oven)

The daybreaker seemed very effective on 'Cooking Day' though our design was very simple. A small paper box with black construction paper around it. This served as the black-bodied absorber, it also is where we cooked the s'mores. Between the walls of the outer box + inner box newspaper was crumbled up and used as insulation. We used a black plastic garbage bag as another absorber, and wrapped it around the outside of the box, this also proved to be insulation. A casserole dish was the window, and since it stood up rather than lay flat, it absorbed more light/heat. Also, since it wasn't made of plastic, and was a smooth surface, it worked more effectively than the plastic wrap so many used.

Our change was a rather simple one, and I found that it didn't help enough. We added black paper to the outside of our box, trying to attract more heat. Although black paper is effective for this purpose, the heat and light didn't do much when it hits the cardboard. The glass casserole dish was mainly for transmitting the heat into the box, not the box itself. Although there was a significant temperature change, I believe this to be so mainly on the outside conditions of the sun. Everyone's oven did better than before, including the control. The control oven was not changed, and yet it climbed 4° hotter than the first testing.

But when you changed your oven, you added newspaper insulation to your design. As you said, it didn't seem to help a lot. Now in your design you put tin foil onto the walls of the larger box, as we did also. But with our oven, the newspaper seemed to serve well,

Middle School Physical Science Example #1

NGSS: PE	NGSS: DCI	NGSS: SEP	NGSS: CC	CCSS: ELA	CCSS: MATH
MS-PS3-3, MS-ETS1-4	PS3.B Conservation of Energy and Energy Transfer	Constructing Explanations and Designing Solutions	Energy and Matter	RST.6-8.1 WHST.6-8.7	MP.2

Sept. 13, 06
magnet activity

3 Qualitative observations:

1 magnets are purple, red orange + black.

2 ruler is see-through.

3 paper clips are gray.

3 Quantitative observations:

1 1 magnet is 18.9 grams

2 4 magnets and 1 clip is 67.4 grams

3 2 clips, 4 mags, + 2 rulers are 143.8g.

Why are several magnets together
an example of a system?

Conclusion:

several magnets together
are an example of a system
because they are a group
of interconnected parts
that work together and
use energy.

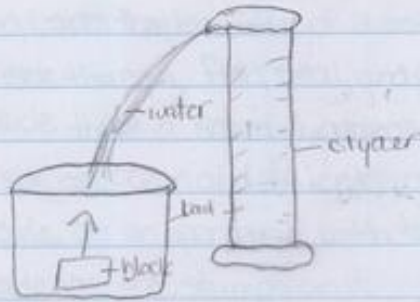
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Middle School Physical Science Example #2

NGSS: PE	NGSS: DCI	NGSS: SEP	NGSS: CC	CCSS: ELA	CCSS: MATH
MS-PS2-5	PS2.B Types of Interactions	Planning and Carrying out Investigations	Cause and Effect	RST.6-8.3, WST.6-8.7	MP.2

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Volume



I am measuring if you add 200 ml of water
will the block float

That will record measurement in a data table

Amount of water

Trials	1	2	3	avg
wax	5ml	6ml	5ml	30
plastic	10ml	15.5ml	20ml	16.8
metal	14ml	14ml	13ml	32

Middle School Physical Science Example #3

NGSS: PE	NGSS: DCI	NGSS: SEP	NGSS: CC	CCSS: ELA	CCSS: MATH
	PS1.A Structure and Properties of Matter	Planning and Carrying Out Investigations	Patterns	RST.6-8.7, WST.6-8.7	MP.4