

Un-Thingy Things:

That which (scientifically) matters
yet isn't matter

SCIENCE FORWARD
MACAULAY HONORS COLLEGE 225
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- 1) Clear your desk of EVERYTHING EXCEPT
two arbitrary objects --such as one pencil and one calculator, one piece of paper and one watch, one ring and one wallet, etc.
The shape, type, color of each object is utterly irrelevant to this exercise.
- 2) Choose one of the two objects. This object will now be known as "Thing #1."
- 3) Identify the remaining object. This object will now be known as "Thing #2."
- 4) Attempt to perform each of the following five seemingly silly tasks. They all sound similarly silly, but some of them are far easier to perform than others. Some of them are, in fact, impossible. Do not spend too much time on these. But do remember them. You will be asked questions about them after the fact. On a sheet of paper,

KEEP track of which were possible and which were impossible!

- i. Place (the center points of) Thing #1 and Thing #2 in two different points in space at the same point in time.
- ii. Place (the center points of) Thing #1 and Thing #2 in two different points in time at the same point in space.
- iii. Place (tcpo) Thing #1 and Thing #2 at the same point in space at the same point in time.
- iv. Place (tcpo) Thing #1 in two different points in time at the same point in space.
- v. Place (tcpo) Thing #2 in two different points in space at the same point in time.

5) Which of the five above tasks were impossible?

6) In exactly one complete sentence each, write down a response to each of the following questions. More than one possible right answer exists, but there is an infinity of answers that are not really constructive for this context (e.g.: "They are both not fish")

i. In what way does time seem similar to space?

ii. In what way does time seem different from space?

*** AND NOW THE KEY QUESTION for **this class context** ***

iii. Based on the activities you found to be possible or impossible, write down one complete sentence of English that provides *your best conjecture* for:

a) The definition of a physical '*particle*'.

It might seem difficult to pin down precisely what '*energy*' IS.

But based on all the above tasks and questions,

b) What is *energy* NOT ?!