

Year 6 Orientation Science Activity ideas

Response 1

We put out microscopes with slides, which is very popular. We also do a basic acid base reaction - 40 ml each of bicarb and vinegar in 100 ml beakers. Pour vinegar on to bicarb to get it to overflow (beakers in trays). Can add food colouring if you want.

Response 2

We are starting with an engineering challenge 20mins (see attached) it's a great little ice breaker, and then we are doing a little treasure hunt around the Science area and labs, 10 questions, simple things like what is the species name of our Breaded Dragon, how many different types of animals in the department, how many science classrooms do we have, what are the science technicians names, find a certain item in the display window that sort of thing, then ending in the Chemistry lab upstairs where we will just put out fun science related items they can play with until the times up. For example The Plasmatron, the airzooka, energy sticks, anatomical models like the kidney, heart, eye, ear and the full skeleton, snap circuits, robots etc... We also have 40 minute sessions.

Response 3

Make a catapult using popsticks and elastic bands. Various construction designs online. Can fire mini marshmallows so not dangerous

Here's one we did

I'd like to give my boys a challenge to design their own catapult as an introduction to Physics so can I please have the following materials split into 8 separate plastic sandwich bags (1 for each group).

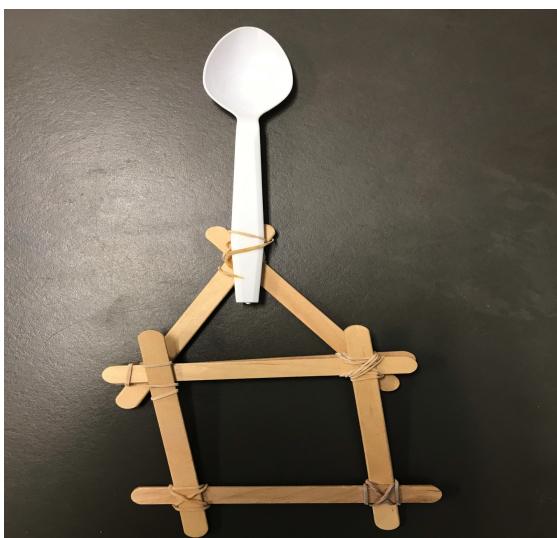
8 groups per class. Can we please have 2 class sets (16 plastic bags made up).

For each group:

- 15 pop sticks
- 10 elastic bands
- 1 plastic spoon
- 1 mini marshmallow
- 1 plastic bottle top lid

Can we also have measuring tapes or trundle wheels to measure the distance (8 per class if possible). A few rolls of sticky tape would also be great!

One design idea below (or attached):



Response 4

We normally use the light boxes, microscope to see slides (blood, parts of insects) give them Skelton to count the human bones

Response 5

We have 8 stations when our year 6's come.

1. Magnets - we set up a retort stand with a magnet attached and from the base of the stand attach a paperclip and string. The paperclip can be suspended just below the magnet to show magnetic forces
2. Biology - Kidney dissection
3. Tuning forks
4. Sound canon - put a balloon on the end of a small piece of PVC pipe and when you pull back the balloon, there is enough air released to blow out a candle
5. Wind-up toys to show energy
6. Chemical reaction - Lead nitrate and Potassium Iodide reaction
7. Electricity - set up a basic circuit
8. Geology - various rock samples and magnifying glasses

Response 6

- magnets and magnetic oil (iron filings in cooking oil),
- dry ice demo's,
- microscopes (I set up some sealed petri dishes with different soil types, and different garden things such as seeds, grass etc... for them to look at under a dissecting microscope),
- rock types/classification game,
- bi-carb and vinegar rockets,
- solar powered car races,
- oobleck,
- lava lamps in bottles (water, cooking oil, food colour and glitter in a bottle)
- Taxonomy with Skittles/M&M's.

Response 7

In the past we've done a simple chromatography practical just using little beakers and water. Plus, another good and easy one is the little activity where you try to get as many drops of water onto a five cent piece. I put the coins into a petri dish, and they just use the plastic transfer pipettes to drop from a little beaker of water onto the coin and count as they go. Everyone gets quite competitive, doesn't take overly long and it's not too much to set up, as long as you have enough five cent coins. It's often done in pairs.

Response 8

- 1) We done change of state demo with year 6, since they were doing physical and chemical change. Firstly, the students were given small worksheet on physical and chemical changes as icebreaker followed by demonstrations.
- 2) Previous years we have done simple circuits as hands on activity.

Response 9

We do Red Cabbage, shampoo, vinegar etc. and universal indicator, different balls and dropping and measuring heights, snack food and heat produced.

Other Activities

1. Observe the science of tea bag rocket
2. Observe the reactions of lighting a match stick. Physical and chemical
3. Rainbow lab