



## How to Make a Comet

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We're going to learn about how to make a comet model from various craft items, an activity you could do in the classroom or an afterschool or at home on your own or even as part of a science camp.

You're going to need something to hold your comet with. I suggest some sort of stick.

Now for the nucleus, you need something that will simulate a dirty, misshapen snowball.

I'm going to use a styrofoam ball you can stick your stick into.

As the comet nucleus is streaming through space, it is sublimating.

It has some gas jets coming off in all different directions so to make our jets and our nucleus, I have some cotton balls, some fuzzy balls, even some packing material.

So I'm going to dab each one of these in a little bit of glue and stick it onto my nucleus.

And then the gas jets, you could make those out of a number of different things.

I'm going to use some yarn.

Remember this comet is outgassing in all different directions.

Those gas jets are actually forming the coma of the comet, kind of a cloud.

To represent that, I'm going to use some of this good stuff and then I'm going to put bubble wrap on because I like bubble wrap, secure that on my stick.

We've got the nucleus, we've got the coma but the most noticeable thing is the tail. The tail that you can see with your unaided eye is the debris tail.

But there's another tail, the ion tail and that ion tail forms on the opposite side of the comet from wherever the sun is.

A lot of times an ion tail will appear blue so I'm going to use this blue chenille stick.

There we go. So that is my model of a comet.

Now yours, of course, will look different.

If you have time, you can have your students make more elaborate models of a comet.

Then you can assess their knowledge of the comet parts by having them describe what they've used to represent those parts.

COMETS!