

Cub Scout Pack 405



**Sept 20th PackMeeting 7:00 pm
Mt Washington Presbyterian
Parking Lot**

**Bring a structure with you to the
pack meeting...**

Work with your parents to find or build something that you think will protect an egg from breaking when it is dropped from the top of a fire truck ladder. Scouts, siblings, and parents are invited to build a structure—it doesn't have to be complicated...it just needs to protect the egg! All projects will be dropped from 25 ft, those with surviving eggs will go as high as we can and be dropped again.

- *Don't make the structure too big (not larger than 10 inches in any direction).*
- Make sure your structure is re-usable for up to three drops.
- Bring extra supplies in case you need to repair the structure between drops!
- Be safe—don't use anything that will shatter harmful pieces or damage the parking lot!
- Ponder the science and be ready to have fun!

The Pack will supply the eggs!

What protects an egg?

As you try to decide what to use to protect an egg, think about some of the following questions...

- Should the egg structure be made of hard or soft materials?
- Should it be heavy or light?
- Should it be made of just one thing or several different things that are layered or combined?
- Should it fall fast through the air or slow? How can I make something fall more slowly through the air?



With your parents' permission, do some experiments!



- Drop an egg onto different materials and see if the egg survives!
- Wrap an egg up in different materials and throw it or kick it and see if the egg survives!

When you find materials that you think will work, figure out how you can put them together...

- Can you wrap the egg in the materials?
- Can you fill a box with the materials and put the egg in?
- Can you put the materials in a bag and put the egg in?



Things to think about...

- What if my egg structure flips over as it falls? Will my egg survive if the structure lands upside-down or on its side?
- Is the egg secured or could it slip out as it falls or if my structure breaks open when it hits the ground?
- Will my egg structure last for three drops or will it break after one or two?

