This is a Real "Smash-Up!"



The "Bull's Eye" Egg Drop Mission

Deep in the heart of the **WAGiVoyage**, you'll now uncover another secret mission.

Using only your wits and a few scattered supplies, you must build a fearless capsule to protect your egg as it falls from nine feet — and land it squarely on the bull's eye before the sea serpent can swoop in and gobble up your egg!



Your Mission:

You'll build a capsule to protect a raw egg dropped from 9 feet high. You'll only get limited materials. Your job is to slow down the egg and give it a soft landing without breaking it!



DANGER ALERT: Your egg MUST land on the bull's eye! If it misses the sea serpent will gobble it up!



The Legend of The Sea Serpent

Deep beneath the classroom floor lives "**Scrambles**," the egghungry sea serpent! Legend says Scrambles was once a tiny classroom pet who accidentally fell into a puddle of science experiment goo.

Now, Scrambles lives in the mysterious depths below the classroom. Scrambles LOVES eggs more than anything. The only thing that keeps Scrambles from rising is a landing zone marked by the bull's-eye!

If your egg misses the bull's-eye and splats... Scrambles will rise in a whirlpool of hungry excitement!

The Drop Zone

The drop zone consists of:

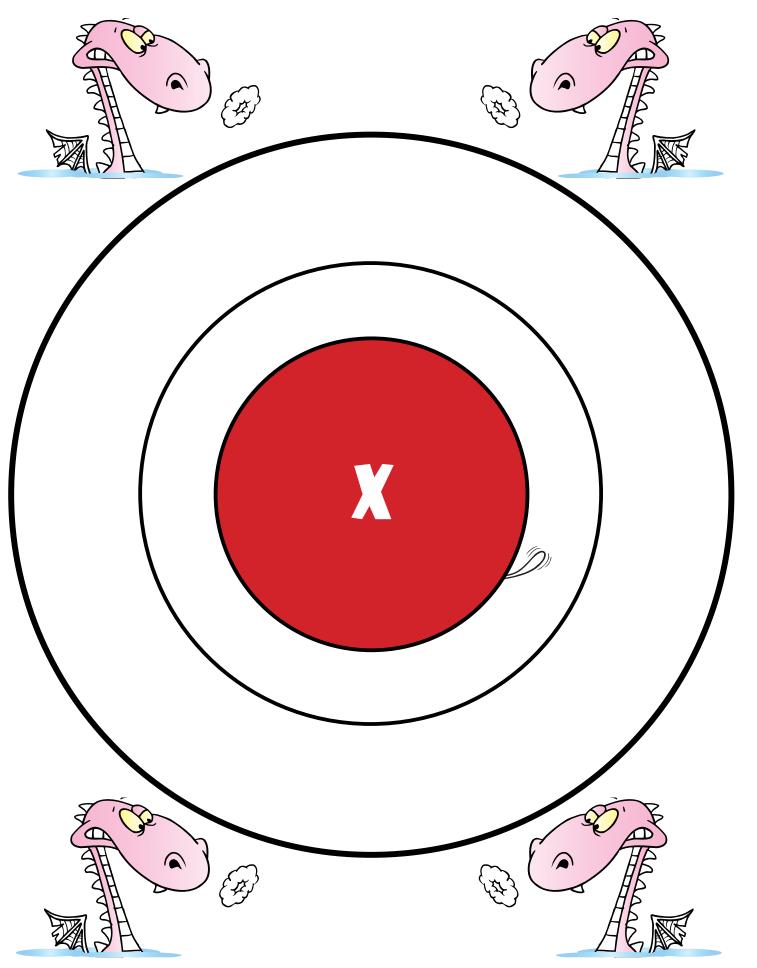
- 1. A small bull's-eye target on the floor
- 2. Three rings:

Center ring (10 points, completely safe from Scrambles)

Middle ring (5 points, Scrambles gets restless)

Outer ring (0 points, Scrambles starts to rise)

Beyond the rings is the **DANGER ZONE** where Scrambles lives!



Supplied Materials:

Each group of students gets the following:

2 balloons

• 2 small paper cups

4 straws

• 1 square foot of plastic wrap

1 foot of aluminum foil

4 rubber bands

4 popsicle sticks

2 feet of tape

3 eggs

• 1 bull's eye target

Floor covering (tarp)

1 pair of scissors

GUIDELINES:

- 1. You are responsible for cleaning up after the drop!
- 2. The egg needs to be inserted easily before competing and quickly checked after the drop.
- 3. The egg must stay inside capsule throughout the drop.
- 4. The judges will provide the competition eggs.
- 5. No manipulation of the egg to strengthen it.
- 6. You need to see the egg inside your capsule at all times.
- 7. No egg-cheating (no hard-boiling!)
- 8. Fewer materials = more points!
- 9. Your egg **MUST** hit the bull's eye to win!



STEP 1: IMAGINE the Challenge

Think like a scientist, superhero, and inventor—all at once!

Does this challenge look like a NASA capsule landing back on Earth, or an apple falling from a tree, or ...?



STEP 2: DEFINE the Challenge

Be a detective and ask this question:

"How can we make something that **keeps an egg safe** when dropped from 9 feet AND **lands exactly on the bull's eye** to avoid becoming Scrambles' breakfast?"

STEP 3: EXPLORE and Fail on Purpose!

PART 1: Fail on Purpose!

- 1. What would guarantee that the egg splats?
- 2. What would you "never" do to protect it from breaking?

Your Wacky Fail Ideas Might Include:

"I'd throw the egg as hard as possible at the target."

"I'd put rocks inside with the egg!"

"I'd close my eyes when aiming at the target!"

"I'd build a catapult aimed at Scrambles' mouth!"

"I'd cover the egg in ketchup to make it tastier to eat!"

PART 2: Flip the Failure!

Now turn each "bad" idea into a good one!

If "throwing the egg into danger" is bad, try "slowing the egg down with a parachute aimed at the bull's eye."

If "putting rocks inside" is bad, try "using soft cushioning materials."

If "closing eyes when aiming" is bad, try "adding a weight to make it fall straight down onto the target."

If "building a catapult" is bad, try "creating landing gear that absorbs shock."

If "making egg tastier" is bad, try "designing your device to look scary to sea serpents!"

STEP 4: ACT — Build Your Egg Protector

- 1. Build your first capsule prototype, climb the ladder, and drop it to see how it performs.
- 2. Learn from the first drop and build your second prototype.
- 3. Then climb the ladder and drop your new capsule to see how it performs.
- 4. Learn from the second drop and it's time to build your competition capsule.
- Now, it's time for the competition drop. Build your final capsule, climb the ladder, and drop away.



Scoring on Final Drop:

Hits the bull's eye

Egg is unbroken and not cracked

10 egg points

10 egg points

5 egg points

Egg is broken

-10 egg points

Container with least materials used

10 egg points

Total Egg Points Score: _____

STEP 5: SHARE YOUR STORY

- 1. Give your egg-saving capsule a cool name.
- 2. What was your wildest idea?
- 3. Did any "bad ideas" turn into a good solution?
- 4. What would you do differently next time?

Time to Journal:

How did you use **Curiosity**, **Compassion**, and **Courage** to land your egg safely?

"Every crack, flop, or bounce makes you smarter and stronger."