

Engineering Fun! Catapult Presentation Notes

As we go through the presentation, answer all the questions. This information will be useful for the upcoming activity!

1. On the title page (*slide 1*), there is a picture with a plane on an aircraft carrier. What is one modern-day use of catapults? (Hint: think about the picture!)

2. (*slide 2*) Catapults!

(a) In the bottom right image, what should the angle θ be equal to if you want to launch the projectile as far as possible?

(b) If the launching part of the catapult (the spoon-shaped piece) is held by a string before the projectile is launched, should that string be loose or tight? Why?

3. (*slide 3*) Imagine you are using a catapult to shoot Ping-Pong balls at a target. You shoot 5 Ping-Pong balls and they all hit the top right corner of the target even though you are aiming for the center bull's-eye.

(a) Are your shots accurate?

(b) Are your shots precise?