3Doodler EDU

Design Challenge

Packaging, Protection and Personality

Facilitator's Guide

The Challenge

Using your 3Doodler and plastic strands, create a package or case that both:

1. Protects an egg from a three-foot drop
2. Reflects your client's personality through design

Overview

Total Time: 100 minutes (2 Class Periods)

This design challenge looks at the balance between protection and aesthetics. Have participants think about how they personalize the protective products that they own, whether it be a phone case, or the exterior of their house.

Challenge Background

Take It Further
Search for resources on how packaging is designed to both protect a product and create an experience for the customer.

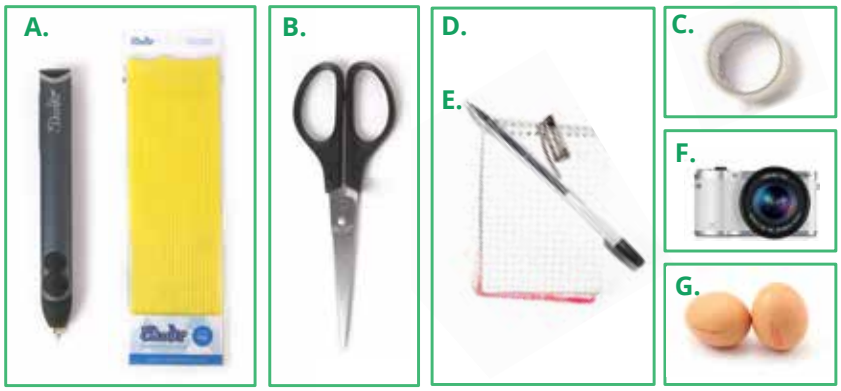
Fig. 1

Fig. 2

We live in a mobile environment. We carry our music, our cameras, our communication and our computing with us. Personal technology is packaged and protected in well-designed cases and shipping boxes. How do these cases protect not only our personal devices but also the precious cargo inside: our memories? Apple's chief design officer Jonathan Ive said, "You design the ritual of unpacking to make the product feel special."

Materials & Tools

Before You Start Doodling
We recommend using a DoodlePad or clear tape placed over paper as a foundation to keep your Doodles in place and so that you can peel them off with ease.



A. 3Doodler Pens and Plastic Strands of various colors (one per student, or have students work in pairs or small groups)
B. Tools (from your 3Doodler box) plus needle-nose pliers or scissors for snipping plastic ends
C. Clear plastic tape or DoodlePad for Doodling foundation
D. Paper for Doodling foundation and extra sketching/note-taking space
E. Drawing utensils (markers, pens or pencils)
F. Camera or video recording device to document the Challenge and results
G. Two eggs per team

Challenge Organization

Challenge Documentation
Take photos & videos of your process using a camera. Document what to do and what not to do. Share your experience with the online community using #3DoodlerEDU!

Challenges are organized into 50-minute periods so they can fit into a traditional classroom structure, or be combined into a single workshop with breaks in between activities. This Challenge is designed to have participants work in short sprints to quickly explore the concepts.

Class 1: Investigate, Design & Build

Total Time: 50 min.

Investigate (15 min.)

Step 1: You and your teammate will be given an egg for which to create a protective package. Study the shape, size, material and qualities of the egg's shell.

Step 2: Decide who you are designing for and discuss the design's purpose.

Consider the following questions:

- Who is the "client" you are designing the package for: a friend, a parent?
- What is the best way to present the egg?
- How will the egg sit in the case?
- How can receiving an egg become a special experience?
- Will the package hide what's inside or will it tell a story about the egg?
- What is the cultural, historical or metaphorical meaning of the egg?

Step 3: Take some time to discuss with your partner and write down your ideas.

Facilitator's Notes
In Class 1, participants will work in teams of two. Each team will select someone to design their egg package for (i.e. the client/customer) and take into consideration the questions provided when designing the package. The teams have to make sure that the design also protects the egg when dropped from a table top to the floor (at least three feet).

Design (15 min.)

Remember to Snip Those Ends
We recommend pliers or scissors for snipping plastic ends. Make sure to keep your plastic ends clean to prevent clogs and jams. Snip plastic after removing it from the 3Doodler pen to make sure it's clean for the next time.

Step 1: Draw out the design of a case for your egg.

Step 2: Use the 3Doodler to test out which colors go well together and correspond with some of your design ideas. Do not start building your design yet.

While designing, consider the following:

- In how many pieces will the package be made?
- How will it open and close?
- What shape will it take and how big will it be?
- Will you have a logo or special decoration for your package?
- How will the case protect the egg if dropped from a table to the floor?

Step 3: Plan out the number and color of plastic strands you will need and which tasks each team member will accomplish during the building phase.

Build (20 min.)

You will have twenty minutes during Class 1 and 30 minutes during Class 2 to complete your package. Begin Doodling using the plan and materials you gathered during the previous step.

Class 2: Build (cont'd), Present & Reflect

Total Time: 50 min.

Build (cont'd) (30 min.)

Step 1: Complete your case build using the 3Doodler pen and plastic strands.

Step 2: Test your case to make sure that 1) the case can fit your egg and 2) the case can be dropped to the floor without breaking apart. Note: Do not put the egg in the case before dropping. The eggs are for measurement and fit purposes only.

Facilitator's Notes

In Class 2, teams will continue to build their package and then test their cases. Remind students that the eggs are for fit and measurement only to avoid making a mess! Set aside 20 minutes at the end of class for teams to present their completed package design and reflect on the process.

Present (15 min.)

Step 1: Now it's time to present your case. Take five minutes to prepare with your teammate. Create a story about the package and the egg inside.

- Who is the case for?
- How do the colors, logos or designs represent something special to the recipient?

Step 2: Demonstrate how the case protects the egg inside. The case can be tested by dropping it from a table top to the floor. Do you think the egg will stay intact, or will it crack? Note: Do not put the egg in the case before dropping. The eggs are for measurement and fit purposes only.

Step 3: Take turns presenting your cases and dropping them in front of the group.

Step 4: Use the feedback model of "I Like, I Wonder, I Wish" when reviewing each other's cases. Don't forget to take pictures or video to document your challenge.

Reflect (5 min.)

Consider the following questions and write down your reflections:

- What do you like about your design?
- What would you change about the design?
- If time and space permits, test your case drop outside or in a safe area, with the egg inside. Did the package keep the egg safe?
- Did your client get what he/she wanted? How will you know?

More Information:

For further information and inspiration about package design, visit:

- https://designschool.canva.com/blog/packaging-design/
- http://www.pdmfoam.com/index.html
- http://glbc.com/products/protective-packaging-design
- http://goo.gl/0Stxud

Images:

Cover Page: https://goo.gl/twCxBt

Fig.1: https://goo.gl/Fq9JjQ

Fig. 2: http://photo.torange.biz/16/16487/HD16487.jpg

Fig. 3: https://c2.staticflickr.com/4/3697/19461516766_8379a0f2d7_z.jpg