

Dear Educator,

Welcome to How to Catch STEAM Week!

We hope that you and your students are excited to participate in a fun, educational, and memorable week celebrating all things STEAM with the bestselling How to Catch series!

In this packet, you will find everything you need to run a successful How to Catch STEAM Week:

For Teachers:

- Tips for Using the How to Catch STEAM Week Activities
- Tips for Running a How to Catch STEAM Fair
- Common Core Standards Sheet

For Students:

- Create Your Own How to Catch Creature activity
- · Write a Story activity
- Stages of Design Thinking visual aid
- Design Thinking Challenge activity
- Design Your Trap activity
- Completion Certificate

We are also thrilled to offer one school that participates in How to Catch STEAM Week \$1000 to use on future STEAM projects!

To enter:

 Post a photo or video of your class participating in How to Catch STEAM Week on TikTok, Facebook, Twitter, or Instagram. When you post, you must:

- Use the hashtag #HowToCatchSweepstakes
- Tag @sourcebookskids on whatever platform you choose
- Every unique post from an educator or school account that meets the criteria above will be entered to win.
- To be eligible, post between November 7th and November 18th.
- For complete rules, please CLICK HERE

We hope that you have a great How to Catch STEAM week! If you have any questions along the way, please feel free to email HowtoCatch@sourcebookspr.com.

STEAM-cerely, The Sourcebooks Team



Tips for using How to Catch STEAM Week Activities

ACTIVITIES

We have created many activities for students to use throughout How to Catch STEAM Week, including:

- Create Your Own How to Catch Creature activity
- Write a Story activity
- Stages of Design Thinking visual aid
- Design Thinking Challenge activity
- Design Your Trap activity

We suggest starting with the "Create Your Own Creature" and "Write a Story" activities. These activities will act as brainstorming exercises and help students develop their ideas. Then have students move on to the "Design Thinking" activities and use them to design a trap for their creature!

As you progress through the week's activities, be sure to discuss with students how they encompass elements of STEAM.

CUSTOMIZATION

We want How to Catch STEAM Week to work for you and your students, depending on their age and the resources you have available. Please feel free to customize the week however works best for you!

Students can work on activities individually, with partners, in small groups, or as a class.

Students can complete one activity every day, or students can complete the first three activities at the beginning of the week and spend the final few days designing their traps and preparing for the How to Catch Classroom STEAM Fair.

Students can actually build How to Catch traps, or just design and draw them.

Students can work on their trap in school or at home. They can build them alone or with the help of an adult, as needed.

You can invite an art teacher, a science teacher, or other specialist to be part of the activities and showcase all the elements of STEAM: Science, Technology, Engineering, Arts, and Mathematics.



Tips for using How to Catch STEAM Week Activities (cont.)

DESIGN YOUR TRAP ACTIVITY

For the final How to Catch STEAM Week activity, we encourage students to design a trap for their How to Catch Creature.

What will their trap look like? How will it work? How might their creature elude the trap? How could they improve the trap?

Have students make a poster illustrating the trap, how it works and the thought behind it. If the age of your students and your available resources allow, students can build models of their traps, either in class or at home.

Materials List

Here are some materials that might be helpful to have on hand. Please note you do not need all of these materials—they are just suggestions to get creative juices flowing!

For drawing traps:

All students participating in How to Catch STEAM Week will create a drawing that shows how their trap will work. For some students, the drawings and posters will be the culmination of their How to Catch STEAM Week participation. For students going on to build models of their traps, these drawings will act as their building plans.

- · Crayons, markers, colored pencils
- · Paper (printer paper or grid paper)
- · Rulers, stencils, and other drawing aids
- · Large pieces of poster board or tri-fold boards (for displays at the How to Catch Classroom STEAM Fair)

For building traps:

If you already have a Maker Space in your classroom, review your supplies and see if there is anything you can add. If students are going to work on their How to Catch traps outside of class, these suggestions might help them gather materials for the project.

- Scissors
- · Glue (glue sticks, hot glue, liquid school glue)
- Tape (painter's tape, duct tape, scotch tape)
- Cardboard (Paper towel and toilet paper rolls, tissue boxes, packing boxes, shoe boxes)
- Pipe cleaners
- Paper cups and plates
- Rubber bands
- Craft sticks
- Straws
- Toothpicks
- String/yarn

- Acrylic paint
- Construction paper
- Old newspaper
- Paper clips
- Old fabric
- Plastic bottles (and caps!)
- Pool noodles
- Jars
- Used toys
- Broken/obsolete technology
- Copper wire
 Perler beads



Tips for Running a How to Catch STEAM Fair

Here are a few things to think about when planning your How to Catch STEAM Fair.

Determine the Format

How will your students share their traps with the audience? Options include:

- Gallery Style: Students stand next to their work and visitors walk around the room looking at the displays and asking questions.
- **Presentation Style:** Students stand at the front of the room and tell the audience about their projects.
- **Do both!** For example, have students present their work to their classmates so everyone gets to see all the traps. Then set up all the posters or models and invite an audience to tour the How to Catch STEAM Fair.

Identify Your Audience

Excitement has been building all week, so now is the time to celebrate and let your students talk about their creatures and traps! Who will attend your How to Catch STEAM Fair? Options include:

- The students in your class
- Other classes from your school
- Other teachers and administrative staff
- · Your students' parents and friends

If you decide to invite people to your How to Catch STEAM Fair, make sure to do it early! We created an invitation template on the website—you can add your own date, time, and location details.

Participation

- Invite an art teacher, a science teacher, or another specialist to be part of the activities and showcase all the elements of STEAM: Science, Technology, Engineering, Arts, and Mathematics.
- Partner with other teachers to make a school-wide event! Younger students could make posters while older students could make models—or even functional traps. The possibilities are endless!

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Tips for Running a How to Catch STEAM Fair (cont.)

Decide on a Venue

You can host your STEAM Fair in your classroom, but you could also consider using a larger venue (an auditorium, gym, etc.). When deciding on a venue, you should consider:

- Are you hosting guests?
- If students are presenting one at a time, is there enough seating room?
- If you are doing a gallery style fair, is there enough room for visitors to walk around?

Decorations

Banner

- The first 25 educators who sign up for How to Catch STEAM Week will receive a special banner to use at the fair.
- You can also print out your own banner—the template is available for download on the How to Catch STEAM Week website—<u>https://www.howtocatchclub.com/steam-week.html</u>

Create Your Own!

- Have students create their own banners and signs to decorate the room for your How to Catch STEAM Fair.
- Students can get involved in promotion as well—they can create signs with the time and date of the fair and post them around the school!



Core Standards for How to Catch STEAM Week

The How to Catch books introduce students to a series of fantastical characters, the children who want to catch them, and the traps the children design. The How to Catch STEAM Week activities extend the reading experience. Drawing inspiration from the books they have read from the series, students invent their own creature, trap, and accompanying adventure. The activities show students how to use the "Design Thinking" process when developing their traps, culminating in a How to Catch STEAM Fair, where students present their creations to classmates and visitors.

Taken as a whole, the activities for How to Catch STEAM Week encompass the following English Language Arts, Mathematics, and Science standards.

Common Core Anchor Standards for ELA

RL.1, RL.2, RL.3, RL.7, RL.9 SL.1, SL.5 W.3, W.7, W.8

Common Core Anchor Standards for Mathematics

MP.1, MP.2

Science and Engineering Practice Standards derived from the National Research Council 2012. A Framework for K-12 Science Education

- 1. Asking questions (for science) and defining problems (for engineering)
- 2. Developing and using models
- 3. Planning and carrying out investigations
- 4. Analyzing and interpreting data
- 5. Using mathematics and computational thinking
- 6. Constructing explanations (for science) and designing solutions (for engineering)
- 7. Engaging in argument from evidence
- 8. Obtaining, evaluating, and communicating information