CLIXO
Classroom

Build for the Silhouettes

Activity Guide

Written by
Heidi Barber
District Educational Technology Specialist
Goldsboro, NC

Online Activity Page

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Overview

Building challenge for learners to add details and stories to silhouette figures on a magnetic surface

Objective

Design builds that fit a figure and help tell its story

Materials for Each Student

- Clixo pieces (mixed shapes and colors)
- Black butcher paper
- Chalk or white crayon
- Scissors and tape
- Optional: projector

Skills

- Spatial reasoning
- Creative storytelling
- Problem-solving
- Fine motor skills
- Explaining and justifying design choices

Ages

Grades K–5 (works well with families)

Duration

One class period (45 minutes) or open station for events

Group Size

Individuals, pairs, or small groups (2–4 students)

Setup Options

- **Magnetic wall:** Mounted life-size silhouettes for whole-group building.
- **Alternate magnetic surfaces:** Doors, lockers, filing cabinets, storage cabinets, easels, cookie sheets, or metal trays. Size silhouettes to fit the surface.

Before the Activity Make the Silhouettes (15–20 minutes)

Teacher or student prep.

- Create silhouette outlines using one of these methods, tracing with chalk or a white crayon so the lines show on black paper:
  - **Floor tracing:** Lay black paper on the floor. A student lies on the paper in an action pose (kicking, running, jumping). A partner or teacher traces around their body.
  - **Shadow tracing:** Tape black paper to a wall. Shine a projector light at the wall. A student stands between the light and the paper in an action pose, and a partner traces their shadow. Move the student closer to the paper for a smaller silhouette, farther away for a larger one.
  - **Image tracing:** Tape black paper to a wall. Project a sports or action silhouette image onto the paper and trace the outline.
- Cut out each silhouette.
- Tape silhouettes to the magnetic surface.



Introduce Meet the Silhouettes (5–7 minutes)

- Give students a few minutes to explore how Clixo pieces connect before building.
- **Present the scenario:** Each silhouette is missing part of its story, and students will use Clixo to fill it in.
- **Ask students:**
  - Who are these characters?
  - What are they doing?
  - What might they need, wear, or hold?
- **Share optional challenge cards:**
  - Build a hat or helmet that fits the figure.
  - Give the figure the equipment they need.
  - Show how the figure is moving.



Build and Place 20–25 minutes

- Students build Clixo items for the silhouettes at the table, then attach their builds on or around a silhouette.
- **Prompt students to test their builds:**
  - Does it stay in place?
  - Does it fit the size and shape of the figure?
  - Does it make sense for what the figure is doing?
- Allow time for revision and improvement based on testing.
- Teachers circulate, asking guiding questions rather than giving solutions.



Share and Reflect 10–13 minutes

- Students do a gallery walk or present to a partner.
- **Students explain:**
  - What they built and which figure it belongs to
  - What story it tells
  - What they changed after testing
- **Facilitate a brief reflection discussion:**
  - What was tricky about building to fit the figure?
  - What would you add if you had more time?



Optional Extensions

MATH EXTENSION

Count and compare the number of pieces used in each build.

ENGINEERING EXTENSION

Add a new constraint (only 5 pieces, one color, or a build that moves).

ELA EXTENSION

Write or dictate a short story about one silhouette using the builds as details.

ART EXTENSION

Students trace and cut their own silhouettes in poses of their choice before building.



Tips

- ✓ This activity works well at family STEM nights, in media centers, and as an early finisher station.

Educational Standards

CCSS MATHEMATICS

CCSS.MATH.CONTENT.K.G.B.5
Model shapes in the world by building shapes from components

CCSS.MATH.CONTENT.1.G.A.2
Compose shapes to create a composite shape

CCSS ENGLISH LANGUAGE ARTS STANDARDS

CCSS.ELA-LITERACY.SL.1.4
Describe people, places, things, and events with relevant details

NGSS (WHERE APPLICABLE)

K-2-ETS1-2
Develop a simple model to illustrate how the shape of an object helps it function

ISTE STANDARDS FOR STUDENTS

1.4.a
Innovative Designer: Students use a deliberate design process to generate ideas and solve problems

1.6.d
Creative Communicator: Students present content customized for the intended audience