

# Intergalactic Hero Training: Designing a Space Marine Suit

## Lesson Overview

In this lesson, Keatyn will step into the boots of a legendary Space Marine. We will explore the science of protective armor, the math of engineering a suit that fits, and the storytelling skills needed to describe a hero's mission. By the end of this lesson, Keatyn will have designed and prototyped her own "Power Armor" gauntlet.

## Learning Objectives

- **Literacy:** Keatyn will use at least three descriptive adjectives to define her hero's special abilities.
- **Math/Engineering:** Keatyn will measure the length and width of her forearm to create a custom-fit piece of armor.
- **Critical Thinking:** Keatyn will explain why specific parts of the armor (helmet, chest plate, gauntlets) are important for a defender of the galaxy.

## Materials Needed

- Cardboard (cereal boxes or shipping boxes)
- Aluminum foil (for that "Space Marine" metallic look)
- Masking tape or duct tape
- Markers (Blue, Gold, and Red are classic Ultramarine colors!)
- Ruler or measuring tape
- Safety scissors
- "The Hero's Log" (a piece of paper or notebook)

## 1. Introduction: The Call to Action (The Hook)

**The Hook:** "Keatyn, the galaxy is huge, and sometimes it needs a hero who is brave, strong, and wears armor as tough as a mountain. Space Marines aren't just soldiers; they are the ultimate protectors! To do their job, they need 'Power Armor'—a suit that makes them stronger and keeps them safe. Today, you are the Lead Engineer and the Hero. Are you ready to suit up?"

**Discussion:** Look at a picture of a Space Marine (like Titus from Space Marine II). Ask: "What do you notice about his suit? Why do you think it is so thick? What colors do you see?"

## 2. Body: The Forge (Instruction & Practice)

### Step 1: The Hero's Identity (I Do/We Do)

**Instruction:** Every Space Marine belongs to a "Chapter" (a team).

*I Do:* Explain that the Blue Chapter is known for being brave and following the rules of heroes.

*We Do:* Let's pick Keatyn's hero name and one special skill.

**Activity:** In "The Hero's Log," write: "My hero name is [Name]. My armor is [Color] and it helps me [Action Verb]."

## Step 2: Engineering Measurements (We Do/You Do)

**Instruction:** Armor that doesn't fit is dangerous! We need to use "The Tech-Priest's Tools" (our ruler) to get the right size.

*We Do:* Show Keatyn how to align the "0" on the ruler with her wrist and measure up to her elbow.

*You Do:* Keatyn measures her forearm length and the width around her wrist. Write these numbers down in the Hero's Log.

## Step 3: Building the Gauntlet (You Do)

**Instruction:** Now we build!

1. **Cut:** Use the measurements to cut a rectangle out of cardboard that can wrap around Keatyn's arm.
2. **Reinforce:** Wrap the cardboard in aluminum foil to give it "Ceramite" strength (the fictional metal in Space Marine II).
3. **Decorate:** Add a "Chapter Icon" (like a star, a skull, or a lightning bolt) using markers.
4. **Seal:** Tape the gauntlet so it slides onto the arm.

## 3. Conclusion: The Mission Briefing (Recap & Closure)

**Summary:** Review the three things every Space Marine needs: A strong name, a perfect fit, and the will to protect others.

**Recap:** Ask Keatyn:

- "How many inches/centimeters long is your armor?"
- "What is the most important part of your hero's suit?"
- "If you had to rescue a planet tomorrow, what would your hero's catchphrase be?"

**Celebration:** Strike a "Space Marine Pose" with the new gauntlet and take a "Hero Photo"!

## Assessment (How we know Keatyn nailed it!)

- **Formative:** Can Keatyn identify the starting point on the ruler during the measurement phase?
- **Summative:** The completed "Hero's Log" entry with adjectives and the physical cardboard gauntlet that fits her arm.

## Differentiation & Adaptability

- **For More Challenge:** Ask Keatyn to calculate the "Area" of her armor piece (Length x Width).
- **For More Creative Play:** Use leftover cardboard to build a "Jump Pack" (backpack) or a "Chainsword" (a safe cardboard version) to complete the set.
- **Digital Option:** If Keatyn prefers screens, use a drawing app to "color-match" her armor design before building it.

## Success Criteria

Keatyn will know she is successful if:

- She has a piece of armor she can actually wear.
- She can explain why heroes wear armor using "Because" statements (e.g., "I wear a helmet *because* it protects my brain!").
- She used a ruler to find at least two different measurements.