



Build A Neighborhood Map: Your Guide To Our World!

 Social Studies •  30 min •  Ages 9-11 • Grade 5

This lesson challenges learners to design and build a 3D model map of a chosen area, such as their neighborhood or a fictional land. They will use common household materials to represent geographic features and landmarks, understanding the importance of maps in daily life.

Our goal is for your child to Identify and represent key physical and human features on a map., Understand basic concepts of scale and perspective in mapmaking., Construct a 3D model to illustrate geographical elevation and landmarks..

What You Need

Cardboard • Newspaper • Tape • Markers



Scan To Tailor

Every child learns differently, and this is just the baseline. Scan to jump into the app and easily tailor this lesson to match your child's exact learning level and see how Mai will guide this lesson.



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Lesson Blueprint

A simple, hands-on lesson that guides your child through curiosity, exploration, and reflection.



Mai's Tips

1. **Resist the urge to physically construct parts of the map yourself:** Your role is to ask guiding questions and provide encouragement, allowing your child's creativity and problem-solving to shine.
 2. **Encourage your child to 'talk through' their design choices as they build:** This helps them articulate their reasoning and solidifies their understanding of map concepts.
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Prep Before Session

1. Gather the materials and choose a safe, comfortable place for the activity.
2. Read through the lesson once so you know where the child will make predictions, test ideas, and reflect.



1 Introduction 5 Min

1. Ask your child to share their experiences with maps. Maps are visual representations of an area, showing features like roads, rivers, or buildings. They help us find places or understand geography.
2. Ask them: "Have you ever used a map to find a treasure, navigate a new place, or just see where you are?"
3. Then ask: "What's the most interesting map you've ever seen, and what did it help you understand?"
4. Encourage them to think about different kinds of maps, like treasure maps, park maps, or even the maps on phones.
5. Done when your child shares an experience or idea about maps.



Done when: Student shares an experience or idea about maps.

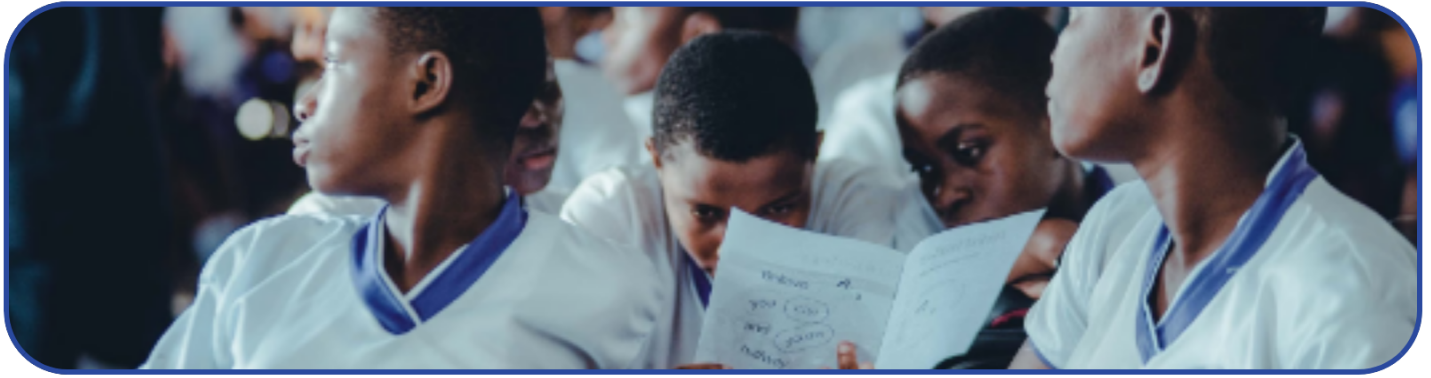


2 Explore & Plan 8 Min

1. Explain that the challenge is to design and build a 3D model map. A map is a visual representation of an area.
2. Help your child choose an area for their map, either real, like your neighborhood, or imaginary.
3. Brainstorm key features to include. Ask them: "What are some really important things you'd want to include on your map so someone new could understand it?"
4. Discuss how to represent these features in 3D. Emphasize `elevation`, which means the height of land, like hills or mountains, helping us see how high or low parts of the land are. Also discuss `landmarks`, which are easy-to-recognize features that help people find their way.
5. Ask: "How will you show elevation, like hills or valleys, or important landmarks using the materials?"
6. Done when your child has chosen an area, brainstormed key features, and made initial plans for their 3D representation.



Done when: Student has chosen an area, brainstormed key features, and made initial plans for their 3D representation.



3 Discussion 6 Min

1. Continue the planning discussion by exploring challenges and solutions in mapmaking. Introduce `scale`, which is the relationship between the size of something on a map and its actual size in the real world, allowing us to show big areas on a small base.
2. Ask them: "What challenges do you think you might face trying to show a big area on a small piece of cardboard?"
3. Discuss how to make the map understandable. Introduce `symbols`, which are small pictures or colors used to stand for different things, making maps clear and easy to read.
4. Ask: "How can you make sure someone looking at your map knows what each part represents?"
5. Finally, ask: "What makes a really helpful map?"
6. Done when your child can explain some challenges of mapmaking and the purpose of symbols.

 **Done when:** Student can explain some challenges of mapmaking and the purpose of symbols/keys.



4 **Activity** 9 Min

1. Provide the materials: a cardboard base, newspaper or paper scraps, tape, markers (or colored pencils/crayons), and optionally glue.
2. Have your child sketch out the general shape of their chosen area onto the cardboard base.
3. Then, guide them to begin layering crumpled newspaper or paper scraps to create elevations like hills or mountains, securing these with tape or glue.
4. Once the landscape has its 3D shape, have them use markers, colored pencils, or crayons to draw in roads, rivers, buildings, and other important landmarks. They can add labels or a simple key if desired.
5. Facilitate problem-solving and encourage their creativity. Resist the urge to do the construction for them.
6. Done when your child has completed their physical 3D map model.



Done when: Student has completed the physical 3D map model.



5 Summary 2 Min

1. Celebrate your child's finished 3D map model and their effort.
2. Have them "present" their map, explaining what each part represents.
3. Ask them to reflect on the experience: "What was the most surprising thing you discovered about mapmaking today?"
4. Also, ask: "How do you think understanding maps helps us in the real world?"
5. Discuss how people like `cartographers` (people who make maps) and urban planners use similar mapmaking skills in real jobs, helping design cities and plan roads.
6. Done when your child shares one key takeaway or reflection about mapmaking.

 **Done when:** Student shares one key takeaway or reflection about mapmaking.

Beyond The Lesson

Fuel their curiosity beyond the lesson with bonus sparks.

Table Talk



Professional cartographers and urban planners use 3D models and advanced maps to design cities, plan roads, and understand environmental changes, helping millions of people navigate and live better.



Did You Know?

Everyday objects can reveal surprising science when we slow down and observe them.



Challenge

Create a simple legend (key) for your map, using symbols for different features. Then, hide a 'treasure' somewhere on the map and write simple directions for someone else to find it!

★ Quick Recap Quiz 4 Min

Check what your young scientist remembers. Each question includes a Parent Tip to help them find the answer without giving it away.

1. What Is The Main Purpose Of A Map?

- ☐ To tell a story
- ☒ To help us find places

💡 Remind them of a time they used a map to go somewhere.

2. How Did We Show Hills Or Mountains On Our 3D Map?

- ☐ By only drawing them flat
- ☒ By adding crumpled paper layers

💡 Think about how we made some parts of our map taller.

3. Why Do Maps Use Symbols Or Different Colors?

- ☐ To make them look pretty
- ☒ To clearly show different features

💡 What if every building looked the same on a map? Would it be easy to find specific places?

4. Who Might Use Maps In Their Job?

- ☐ A baker or a singer
- ☒ A pilot or a city planner

 Think about jobs where knowing where things are is super important.