

Building Roads

Let's build roads for our cars! Children will connect different materials to design and create roads for their toys.

STEM Focus: Engineering

Experiences Your Children Will Have

- Designing and building with materials
- Exploring how things connect and work together

Vocabulary

- Design: To plan how something will look or work
- Idea: A thought or plan
- Connect: To join things together
- Adjust: To make small changes to something

Materials

- Toy cars
- Paper, cardboard, felt, or other materials for road pieces
- Optional: curved pieces or recycled materials

Beginning

- Tell your child: *A car needs a road to travel, but our cars don't have a road!*
- Demonstrate how to place a road piece to begin a design.
- Add another piece, connected with the first, and say: *Now here is a road! We can make it longer by connecting more pieces!*
- Ask, *I wonder how you are going to connect your pieces to build a road?*
- Invite your child to begin building.

Middle

- Encourage your child to explore with the road pieces and cars.
- Use the materials alongside your child and imitate how they use them.
- Talk about what they are doing. You might say, *You made a long road; You added a curve.*
- While interacting with your child, intentionally use the vocabulary listed above
- Use the specific strategies below depending on your child's age:

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- Infants and toddlers may begin to explore the materials by mouthing, pushing, touching, or moving materials. You can support them by describing actions: *You are pushing the car; The road is next to you.*
- Preschoolers may build simple roads and connect pieces. You can support them by asking questions: *Where will your road go?; How can you make it longer?*
- School-age children may plan and create more detailed road systems. You can support your child by encouraging them to think: *What is your plan?; How are you going to design your road?*

End

- As you notice your child begin to lose interest, give them a warning that you are going to put the materials away. You might say, *In a few moments we are going to clean up. You can try out one more idea with your roads and cars.*
- Encourage your child to help you clean up the materials and put them away together.

Additional Learning

- Give older children a large piece of paper or connect several pieces of paper together. Have children draw a map of their home, neighborhood, or bedroom.
- Give children a map of where you live. Before running errands or going to school, let them have the map and follow it as you drive.