

# STEM

Education and Outreach

# ACTIVITY BOOK

**m** DEPARTMENT OF  
TRANSPORTATION

Early Learner Edition

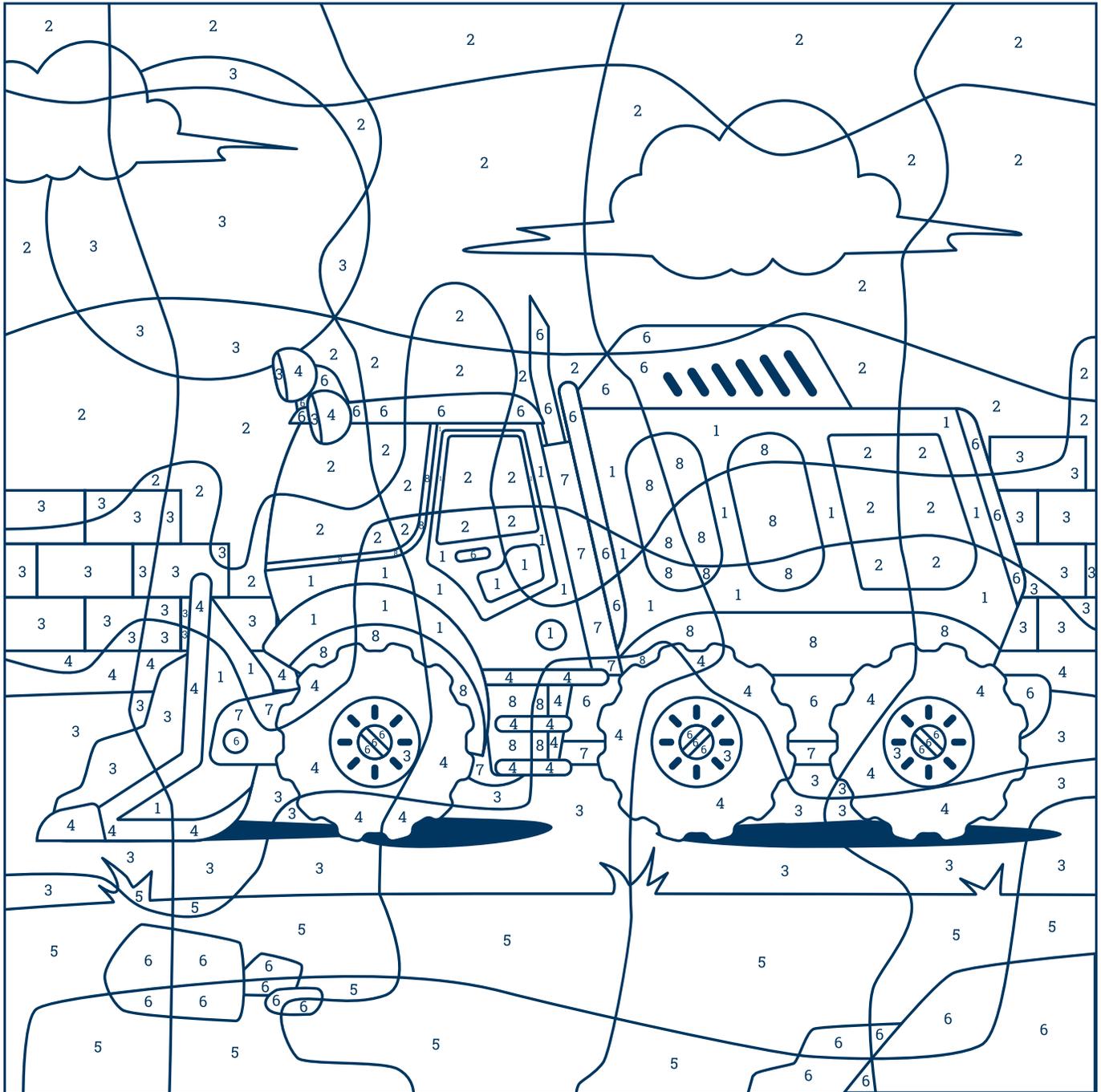
UPDATED: FALL 2020



# Color by Numbers



What type of equipment is used to clear the path of a snowy road? Use the color key to fill the image below.



**📌 DID YOU KNOW?**  
The piece of construction equipment shown above is a **snow plow!**

# Find the Hidden Objects



After the area is cleared of debris, construction workers can begin building the road.  
Find 10 small shovels hidden in the scene below.

Hidden Object: 



**A PIPES**  
Water, sewer and utility pipes run underneath the road.

**B GRAVEL**  
Gravel is used to create a solid base for the asphalt.

**C ASPHALT**  
Asphalt is the black material used to make roads.

**D STREET SIGNS**  
Street signs help people navigate the roads.

**E PEOPLE**  
Construction workers help repair the roads we use.

**F CARS**  
Vehicles drive safely through construction areas.

# Complete a Street Sign Scavenger Hunt



Look for different street signs the next time you are traveling and cross off each of the signs that you see.

## NEED SOME HELP?

Do you know what **all of these different signs** mean?  
Ask an adult to help you with any you do not recognize.

# Decode a Message



How does your family travel around town? Use the alphabet key to decode the answer message below.

ALPHABET KEY												
A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

**B**

,

.

**WHAT DO YOU THINK?**

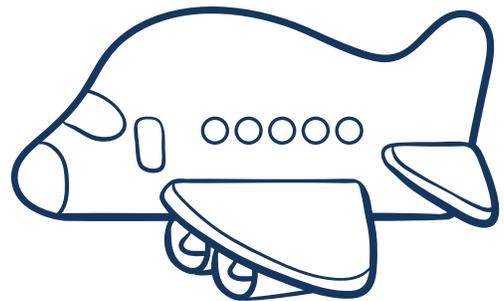
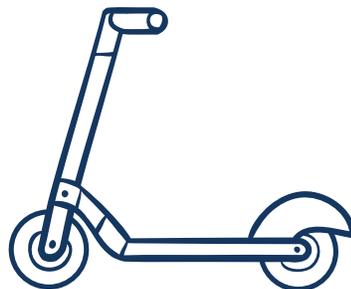
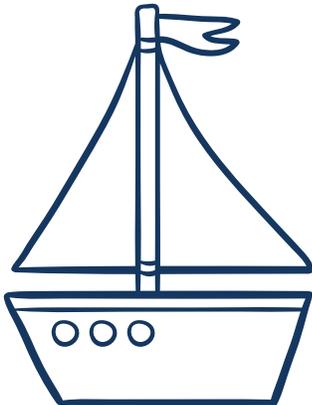
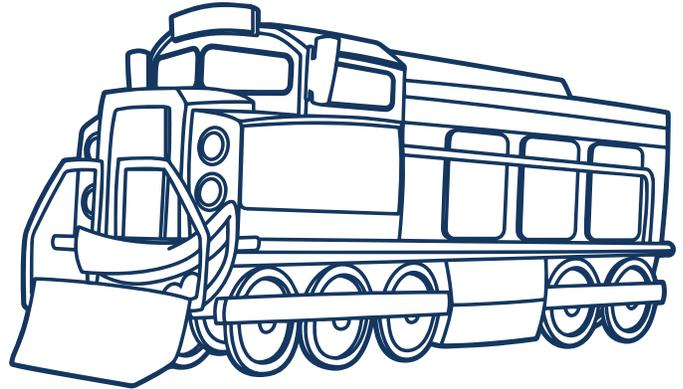
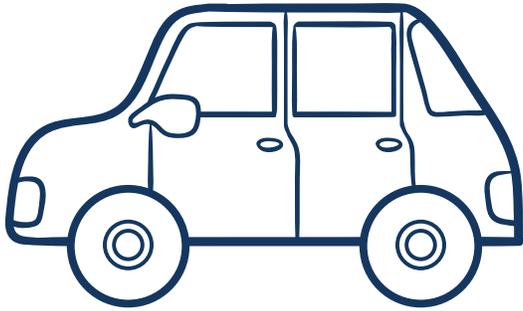
Where are some places you have traveled to by **bike, car or bus**? Write or draw them below.

# Coloring Page



## DID YOU KNOW?

People in Minnesota travel in **many different ways**. What's your favorite way to get from place to place?



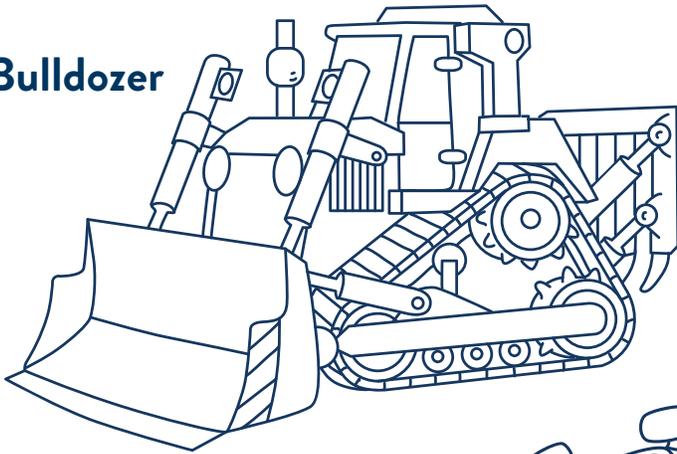
# Coloring Page



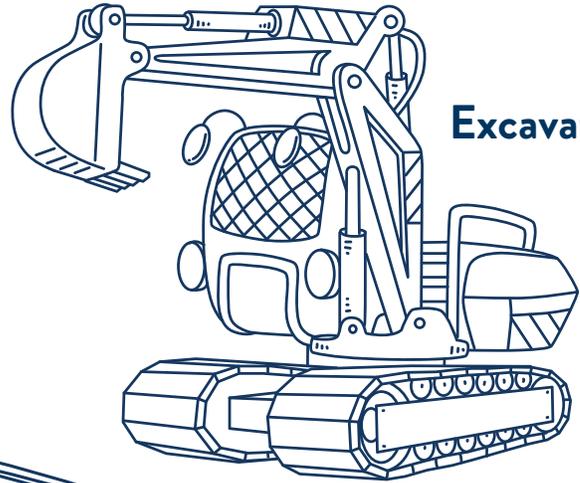
## DID YOU KNOW?

MnDOT uses equipment like the machines shown here to **build and maintain** roads and bridges.

**Bulldozer**



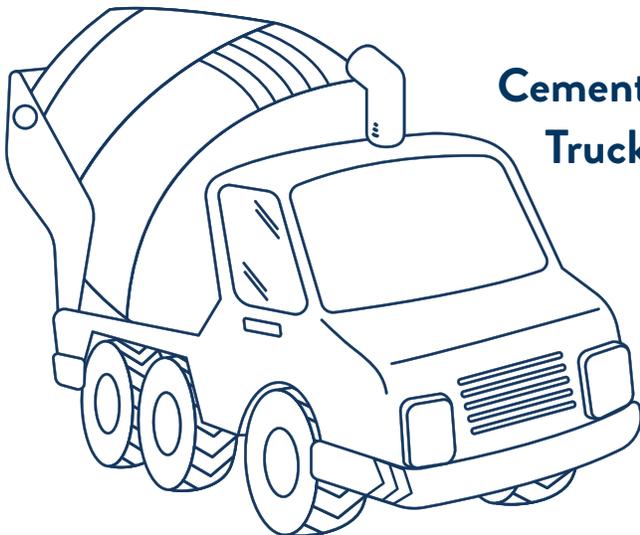
**Excavator**



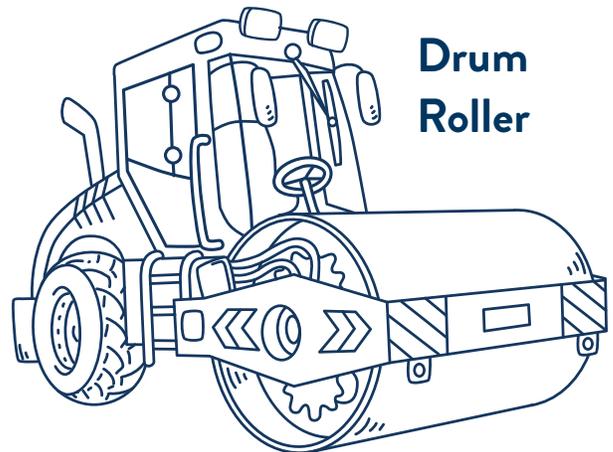
**Front End Loader**



**Cement Truck**



**Drum Roller**



# Find Similar Objects



Engineers, architects and construction workers use all types of tools. Find five objects from Group 1 that match perfectly to Group 2.

Group 1:



Group 2:



**WHAT DO YOU THINK?**

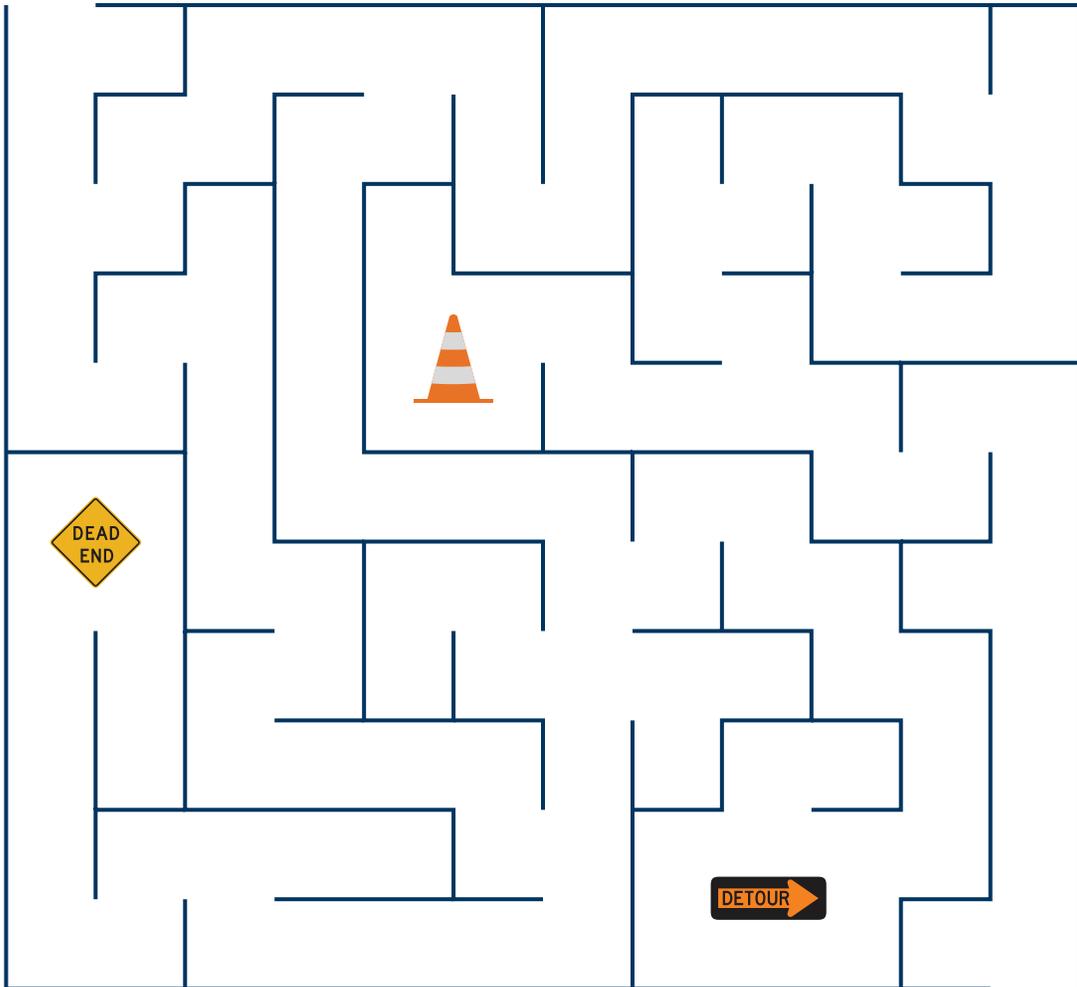
What types of tools do you see or use at school? Write or draw them below.

# Complete the Maze



MnDOT works on many different types of projects. Help a construction worker get all the way through the maze to their job site below.

Start



Finish

## DID YOU KNOW?

There are **many types of skills and careers** that go into completing a project.

### Careers:

- Mapping
- Planning
- Construction Inspector
- Engineering

### Focus Areas:

- Water Quality
- Land Management
- Historic Bridges
- Aeronautics

# Check for Safety



*Safety is a core value!* The Minnesota Department of Transportation works hard to keep employees and the public safe during construction. Can you spot five different unsafe practices in this construction site?



## NEED SOME HELP?

**Safety is essential** for all construction projects. Common safety checks include:

- All workers wearing a hard hat or other protective gear
- All pedestrians obeying the posted safety signs and barricades
- All people paying attention and keeping a distraction-free construction zone
- Removing any standing water to avoid slips and accidents
- Avoiding standing in the path of any heavy equipment
- Boards or loose materials that could be tripped on
- Using safe bridges and guardrails

# Connect the Dots



Draw a line from each numbered dot to the next one, in order.



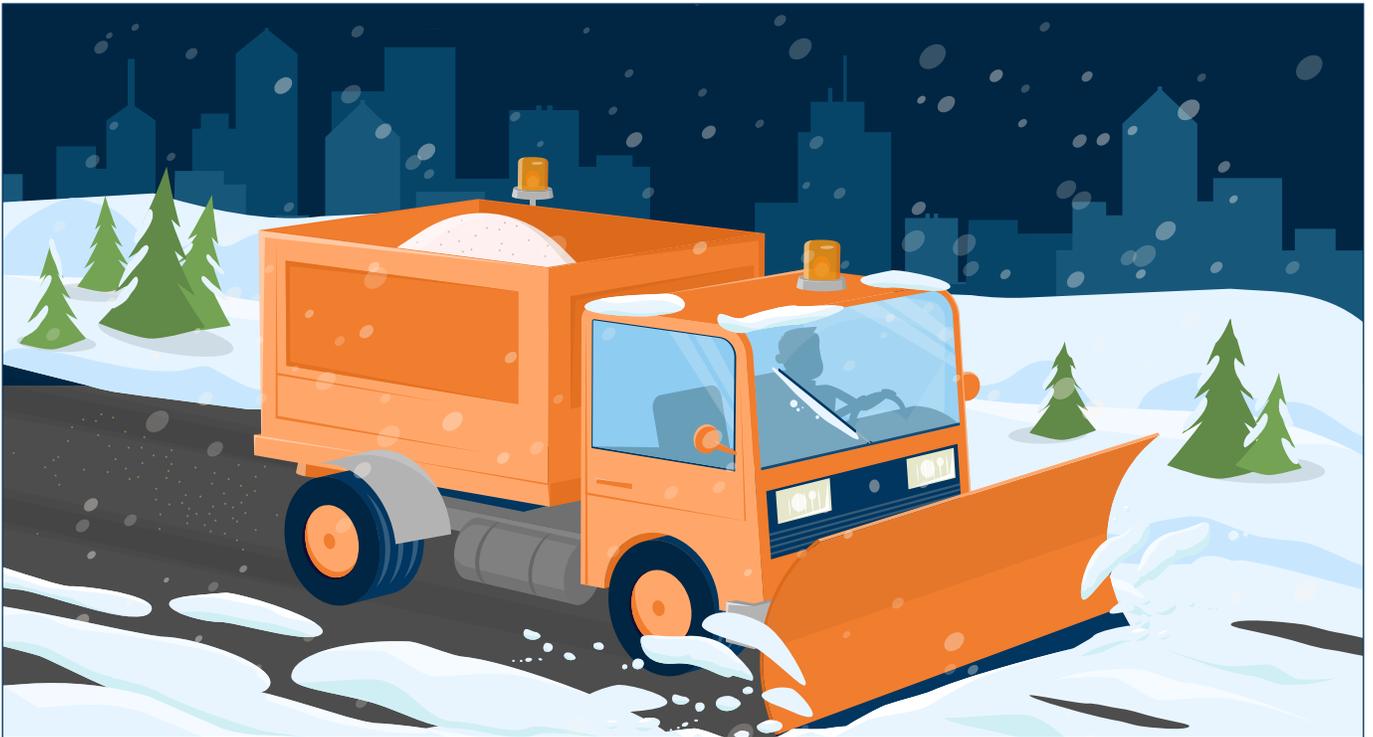
**🔍 DID YOU KNOW?**  
Minnesota has **135 publicly-owned and publicly-funded airports**, and **15 public seaplane bases** located across the state.

# Spot the Difference



Find 5 differences between Scene 1 and Scene 2 below.

Scene 1: \_\_\_\_\_



Scene 2: \_\_\_\_\_



**DID YOU KNOW?**

MnDOT operates a fleet of 800 snow plows during Minnesota's cold winters!