Grades 5-8 Lesson

How To Dig Safe

Aii educates to advance understanding of the world around us and encourage future leaders and innovators. This lesson centers around public safety.

Did You Know?

Underneath your feet, there are thousands of sensitive items. These include sprinkler lines, electrical wires, phone and internet cables, pipelines, water pipes, sewage, and more! Across America, there are over 20 million miles of these, and digging into them can be dangerous - even deadly!

Time: 5 minutes

Materials: Your computer, phone, or tablet. Note or sketch pad

Action: Read, take some notes, sketch some pictures

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Many construction crews and businesses take extra care when digging. This is a practice known as **Damage Prevention** or **Facility Safety**.

It is called “damage prevention” because, it tries to prevent damage. The things being avoided – the pipelines, cables, wires, and more – are called “facilities” or “utilities.”

These facilities are everywhere! They run below your front and back yard, under driveways and parking lots, under homes, public parks, streets, and more. Because they are so common, and because we cannot see through the dirt, it is very dangerous to start digging without following important safety rules.

Three days before digging, you should call 811, which is a call center specifically for identifying underground facilities to keep everyone safe.
Know what to avoid!

When you call 8-1-1, someone comes to your dig site and marks the ground with colored spray paint and flags.

Those colors represent the type of facility below the surface:

- **Red** = electrical lines
- **Yellow** = gas and oil
- **Blue** = water
- **Green** = sewage
- **Orange** = internet and phone

Diggers - or excavators - rely on these colored markings to know where the facilities are located under the surface. That means it is important not to touch or remove the flags.

Damage prevention is a group effort. It takes everyone doing their part. Three days before you dig, call 811. Wait for the colored markings, and do not interfere with them. Then dig carefully around them!
Pop Quiz!

Does every dig require a call to 811?

Yes! Even if it is just digging in your own backyard, for landscaping, to build a deck, or to bury a pet.

Are some colors more dangerous than others?

Yes, yellow is the most dangerous because natural gas leaks can lead to explosions and serious injury or death! But take care with every color, no matter which one it is. And always call 811, so you can know what is below.

Can I move a flag if I put it back?

No! You should never move a flag, even if you put it right back. You may accidentally put it in the wrong place, and even a few inches off can lead to damage.

Quiz Answers!
Optional Activity:

Take a walk around your neighborhood or a local park. Try to spot colored spray paint or little flags. You may see spray paint on the road or the sidewalk. You may also notice things like lamp posts or sprinkler systems. If you see anything that uses electricity or has water running to it, you know that under the ground are cables, wires, and pipes connected to it!

Write down the things you noticed and sketch them so you can tell friends and family about the importance of being safe when digging!

Remember to call 811 first, so you don’t have to call 911 later!