

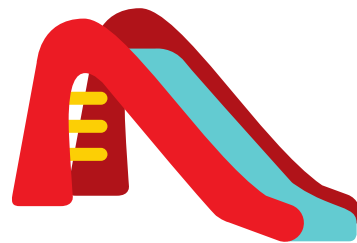


SCIENCE CAREER
ADVENTURES

A woman with dark hair, wearing a blue long-sleeved shirt and a high-visibility orange and grey safety vest, is smiling and looking towards the camera. She is holding a clipboard with papers. The background is a blurred industrial setting, likely a warehouse or factory, with warm lighting and wooden pallets.

Connie the Structural Engineer: Pushing and Pulling

Meet Connie!



Hi! My name is Connie. I'm a structural engineer. A structural engineer is a person who builds new things. I build houses and slides that are in parks.

Why I Became a Structural Engineer



I like to use blocks to build buildings. Structural engineers get to build buildings too!

I like to work in groups at school. Structural engineers work in groups when they build buildings.

Take a Class Vote!



**Do you think
it would be
fun to be a
structural
engineer?**



Building Monkey Bars

Today, I am building monkey bars. It's my job to decide what materials we should use to build the monkey bars.



I am using steel to build! Steel is very strong. Monkey bars need to be made from strong materials. That way, kids can swing on the monkey bars during recess.

Building Monkey Bars

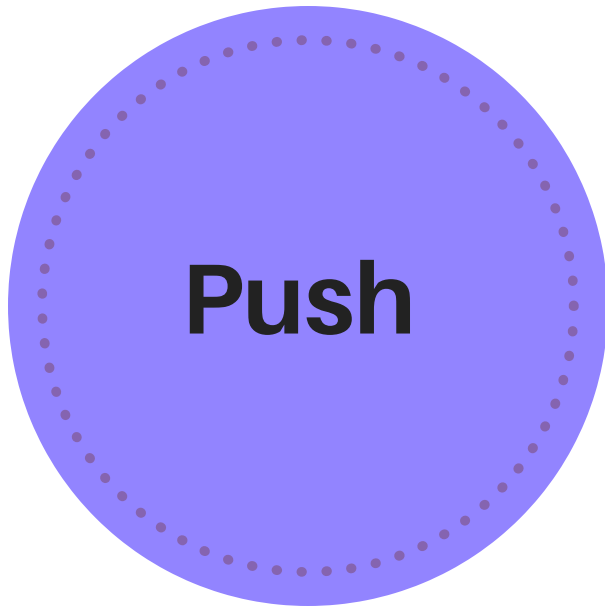
Oh no! The steel is in a big pile on the ground. We need to move the steel from the pile on the ground to the playground. The steel is very heavy! It is too heavy for me to carry with my hands.



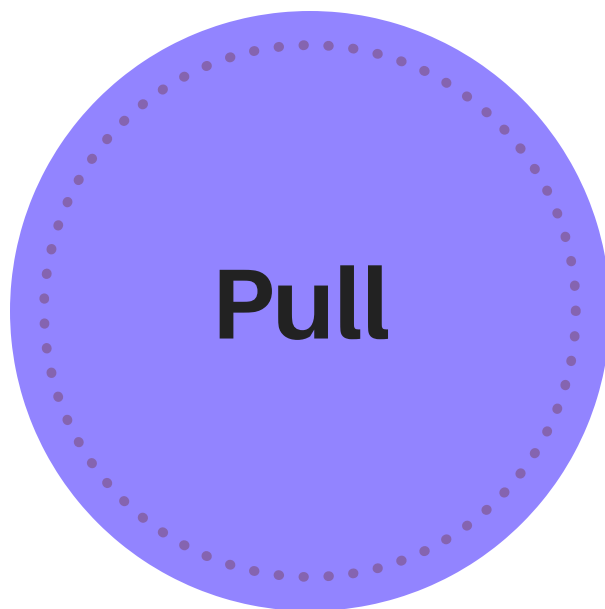
Do you have an idea for how we can move the steel to the playground?

Push or Pull?

We need to either push or pull the steel to move it.



A push is when you move something away from you.



A pull is when you move something towards you.

Machines that Push or Pull

Machines can help me push or pull the steel.



I can use a bulldozer to push the steel.



I can use a crane to pull the steel.

Check Out These Monkey Bars!



**I decided to use a crane to pull the steel.
Now, we can use the steel to build the
monkey bars!**