ENGINEERING DESIGN PROCESS

with

snap
blueprint

test
your prototype

improve
and iterate on
your design

prototype
your design

define
the problem

plan
your idea

ask
why is this
a problem?

imagine
potential solutions in
the real world
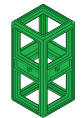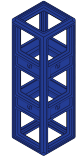
sphero

blueprint snap

parts list

trusses & weighted trusses
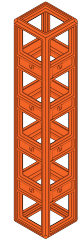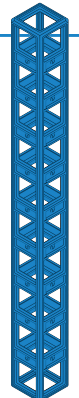
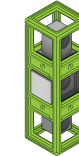1x Pitch Truss
2x Pitch Truss
3x Pitch Truss
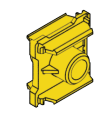4x Pitch Truss
5x Pitch Truss
10x Pitch Truss
1x Pitch Weighted Truss
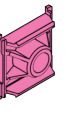3x Pitch Weighted Truss

connectors & hinges
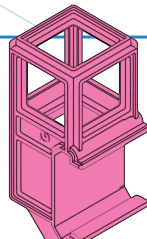
Connector
Lock Plate
Bearing Plate
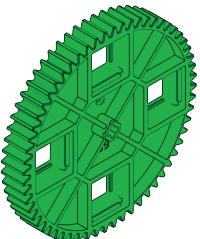Cardboard Clamp
Turntable
Hinge
Linear Motion Bracket

gears

20T Gear
60T Gear

shafts & shaft collar

2x Pitch Capped Shaft
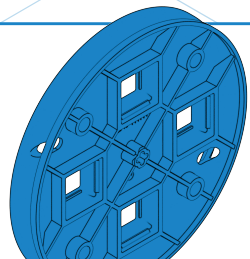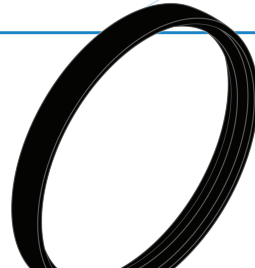3x Pitch Capped Shaft
4x Pitch Capped Shaft
Shaft Collar

5x Pitch Shaft
6x Pitch Shaft
10x Pitch Shaft

pulleys & tires

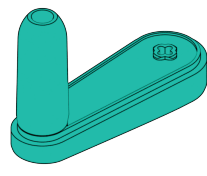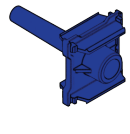30mm Pulley
45mm Pulley
90mm Pulley
100mm Tire
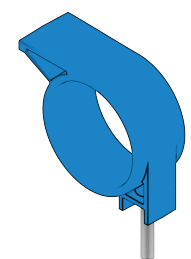
ring tool

Ring Tool

spool, ropes, and rope anchor
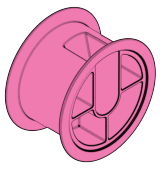
Spool
Hand Crank
Rope Anchor

0.5m Rope
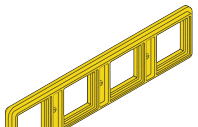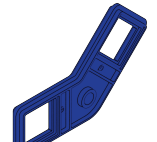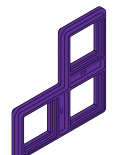1m Rope
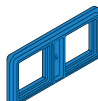
plates

1x2 Plate
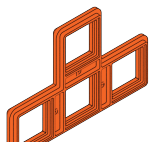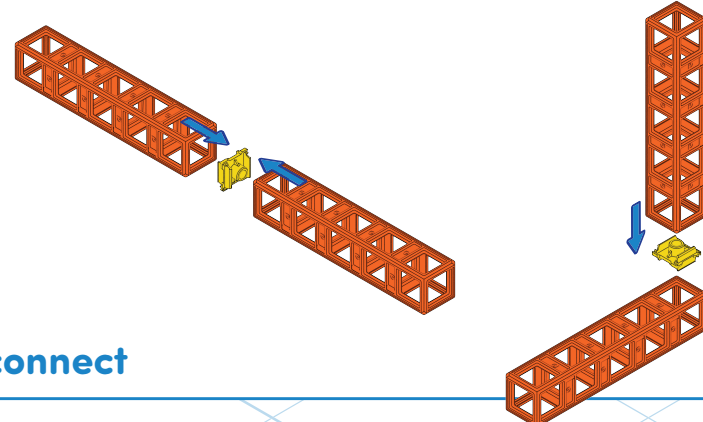1x4 Plate
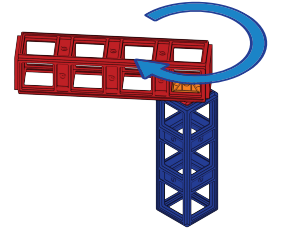2x2 45° Angle Plate
2x2 90° Angle Plate
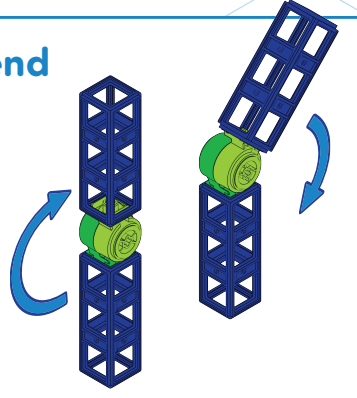2x3 Tee Plate

best build practices

connect

twist

bend

reinforce

create motion

gear

pulley
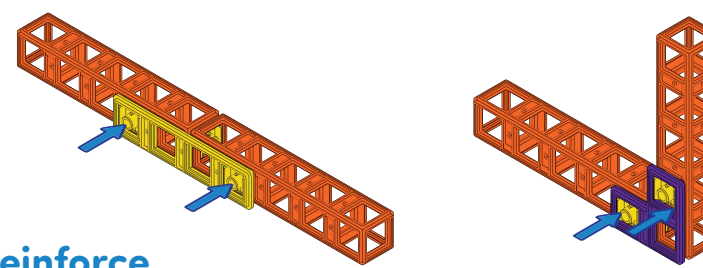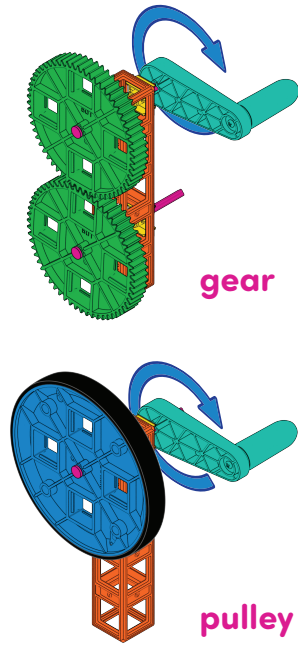
wind rope
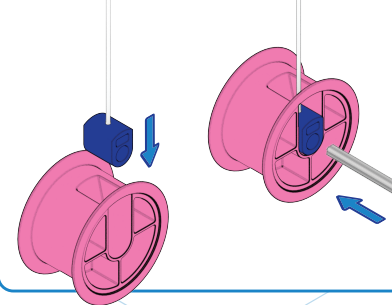
craft
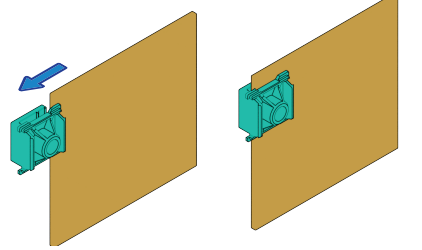
attach rope
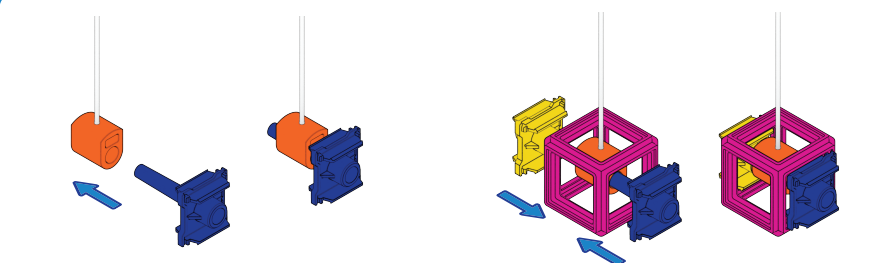
remove connector

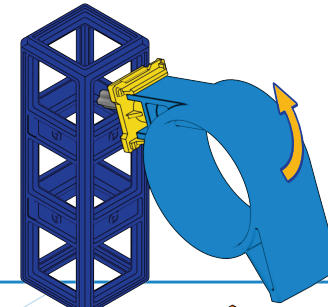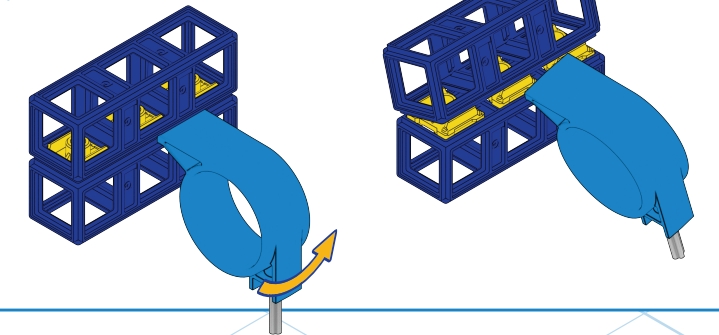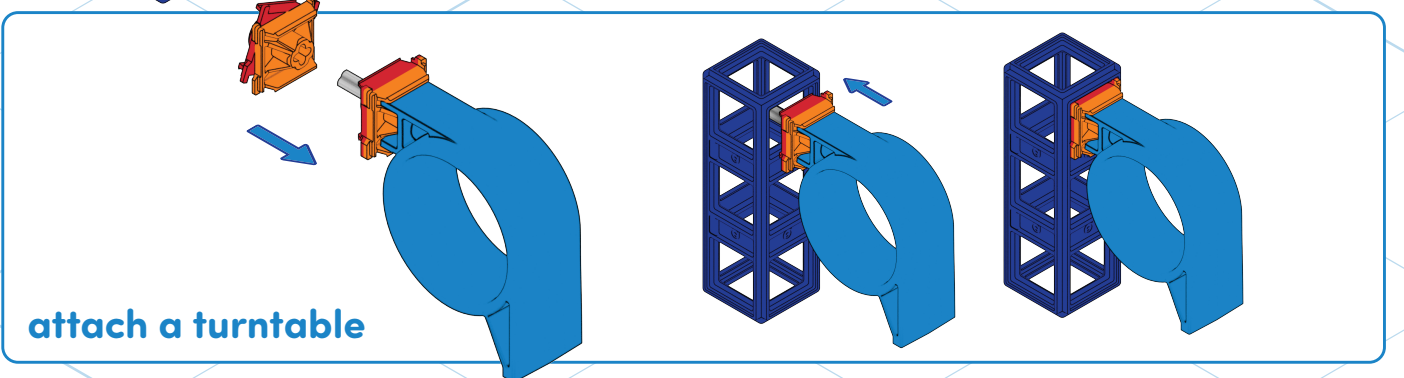### separate trusses

attach a turntable

learning that clicks™