

LEGO® EDUCATION SPIKE™ PRIME
VIRTUAL SUMMER CAMP BETA

If you feel stuck, get inspired by these fun ideas from our Master Builders. You can play around with these bits of code, add them to your creation, and end up with something totally unexpected!



TRAVEL AGENTS help people get anywhere they want to go. They have connections all over the world and know the best ways for you to get around while you're visiting.

CHALLENGE 3:
TRANSPORTATION

Think about all the ways that you get around. You can walk, ride, fly, or glide. There are many ways you to get from one place to another: skateboards, scooters, bikes, cars, busses, trains. You power some of these, and motors power others. Think about other vehicles that fly you through the sky or zip you over or even under water. Where do you really want to go right now? How will you get there? On the ground? Through air? Through the water? Will you need a vehicle to get your there? Will your vehicle need wheels?

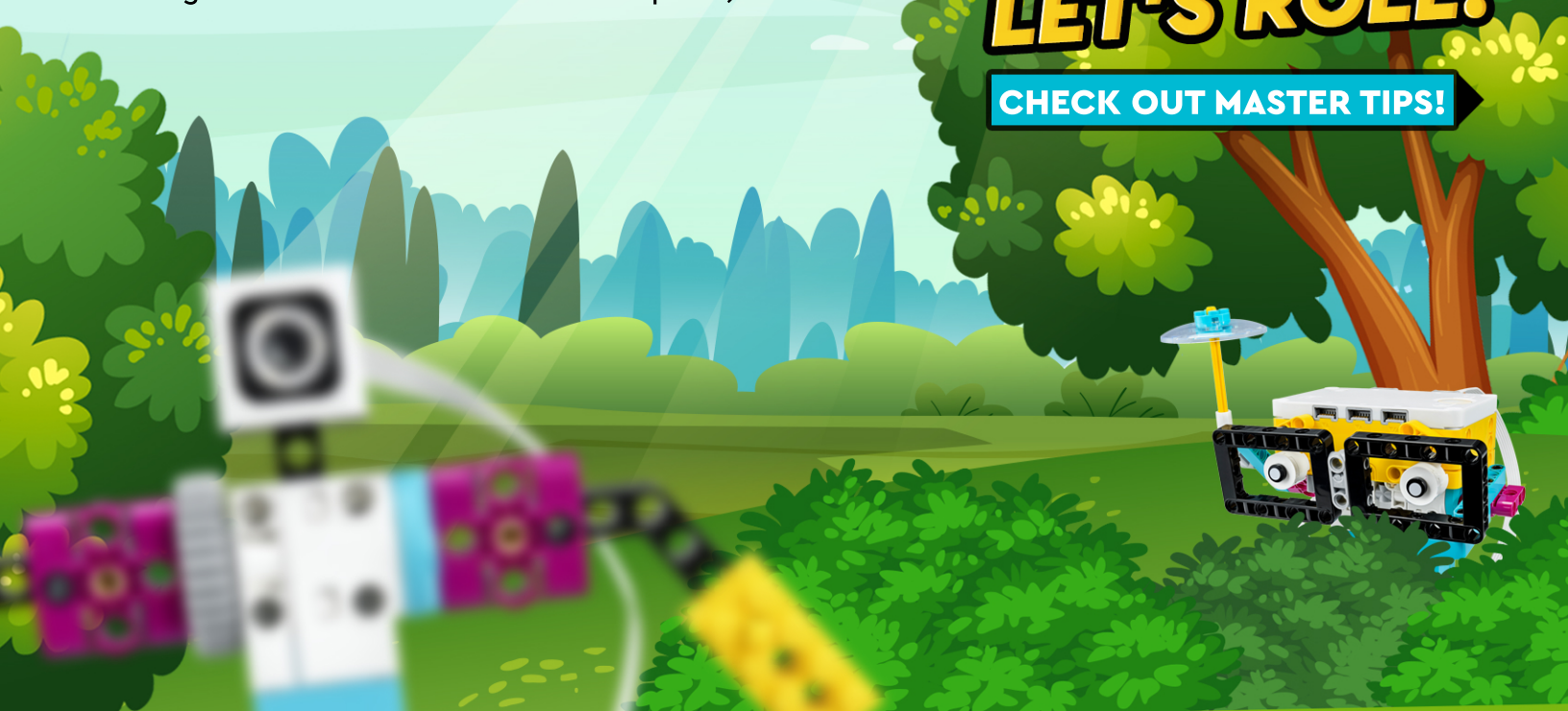
Challenge yourself to create a model of how you get around. Start by describing where you will go and the landscape you need to cross to get there. List obstacles you might need to overcome such as bumpy roads or strong winds or big waves. Maybe you'll be crossing the universe? Brainstorm and sketch your ideas. Start building and testing your model. (Don't test your model in real water though because the motors are not waterproof.)



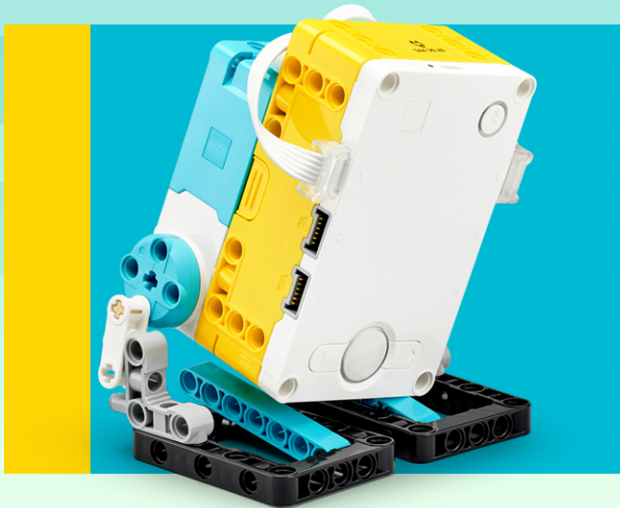
Keep on tweaking your design until it moves the way you want it to. Give your new vehicle a name. You might want to give it a theme or design. Don't be afraid try something new. If it doesn't work or make total sense at first, that's ok. You can try a different approach.

LET'S ROLL!

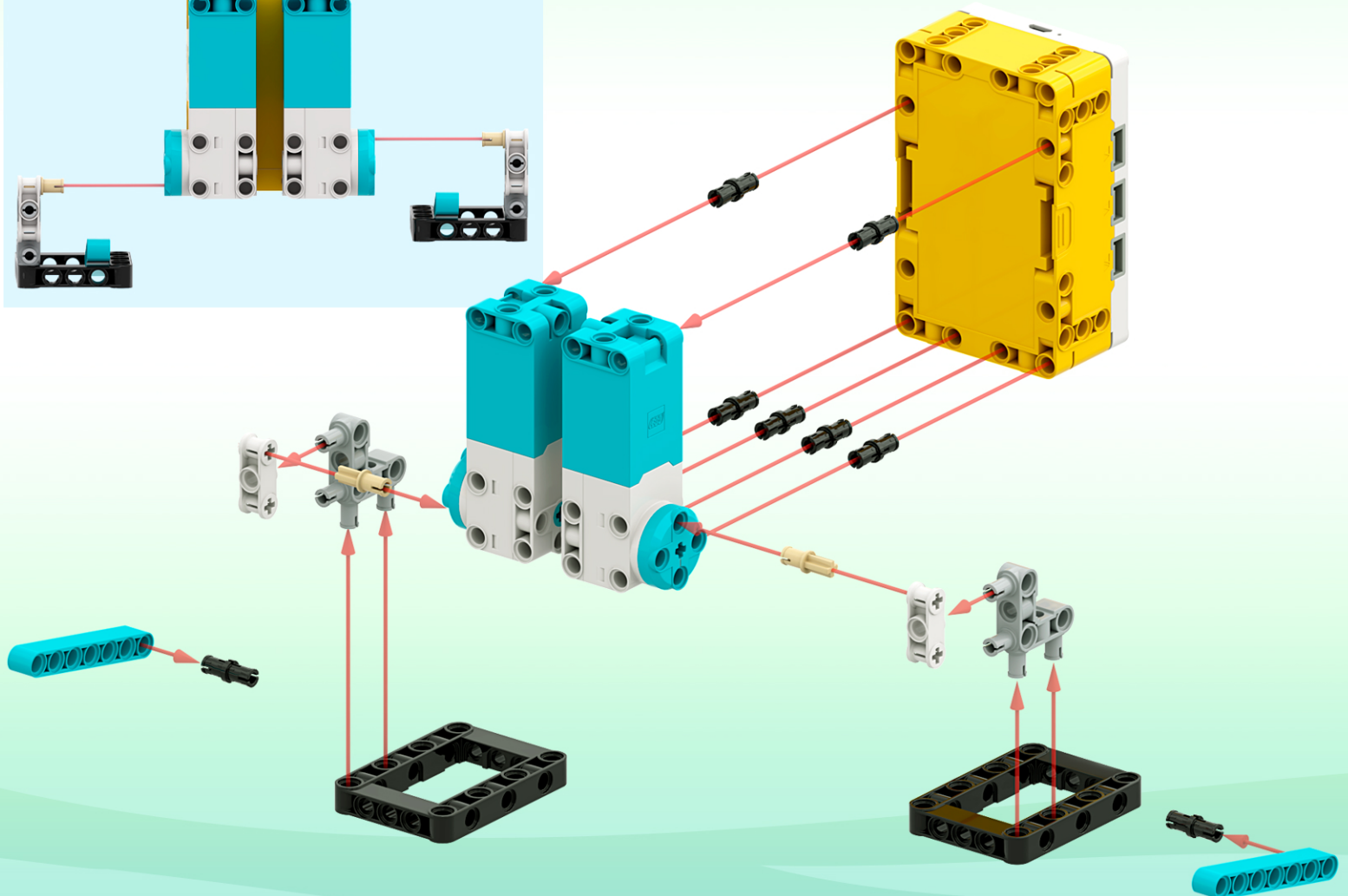
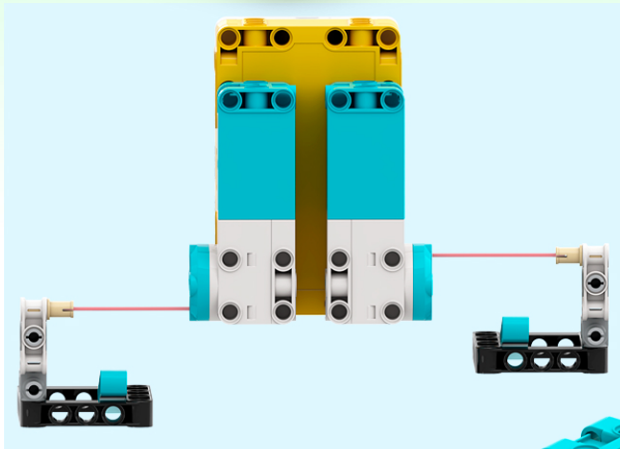
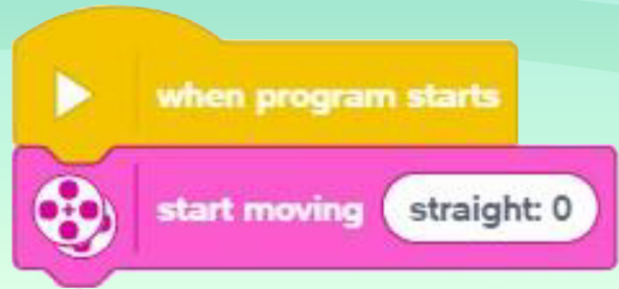
CHECK OUT MASTER TIPS!



- Create a simple walker.
- Add sensors to trigger different behaviors.



Code Sample 1 Beginner inspiration: WALK ABOUT

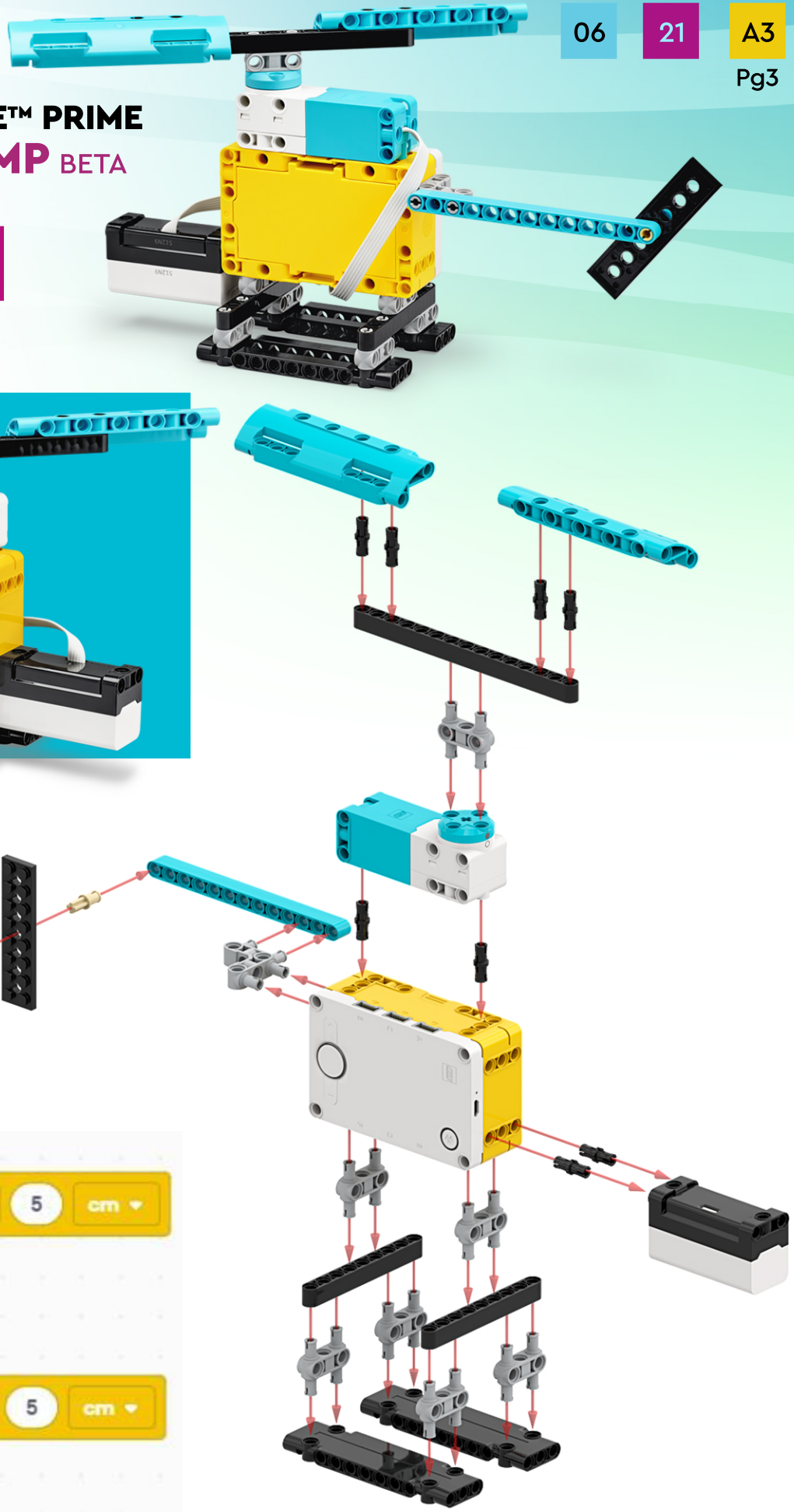
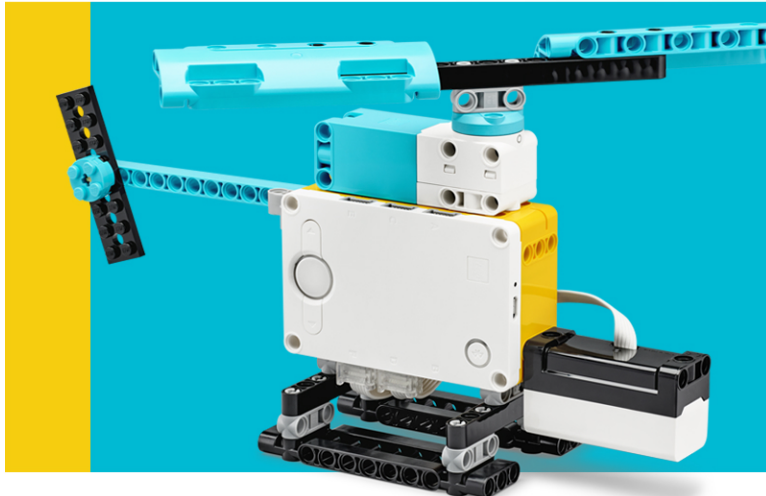


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Inspiration 2: LIFT OFF

- Introduce a distance sensor.
- Add sounds and lights.



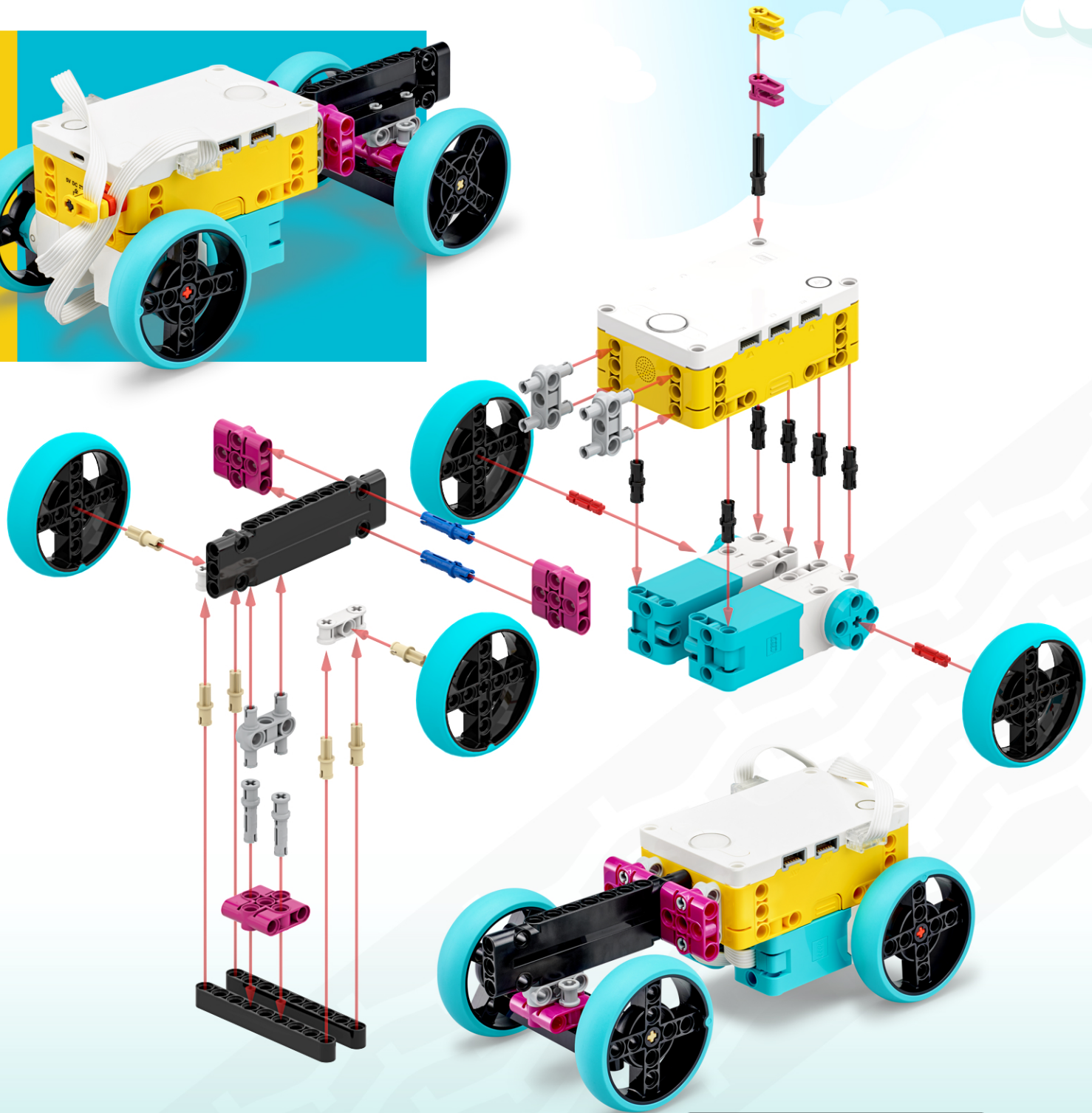
Code Sample 2

Intermediate Inspiration: LIFT OFF

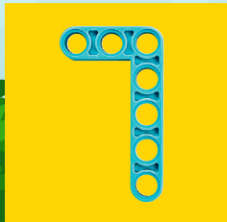
```
when farther than 5 cm
  start motor

when closer than 5 cm
  stop motor
```

- Engineer car steering (can be improved!).
- Create obstacle courses your steering can master.



CHECK OUT THE CODE!



We can't wait to see your awesome solution to this week's project! Ask a grown-up to share your build, tag LEGO® Education on Twitter (@LEGO_Education) or Instagram (@LEGOeducation) with the hashtag #LEGOeduSPIKEprime for a chance to be featured as Build of the Week!

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Code Sample 3
Advanced Inspiration: **MAKE IT YOURS**

```
when program starts
  set movement motors to B+A
  set movement speed to 75 %
  move straight: 0 for 25 cm
  move right: 65 for 10 cm
  move straight: 0 for 30 cm
```

