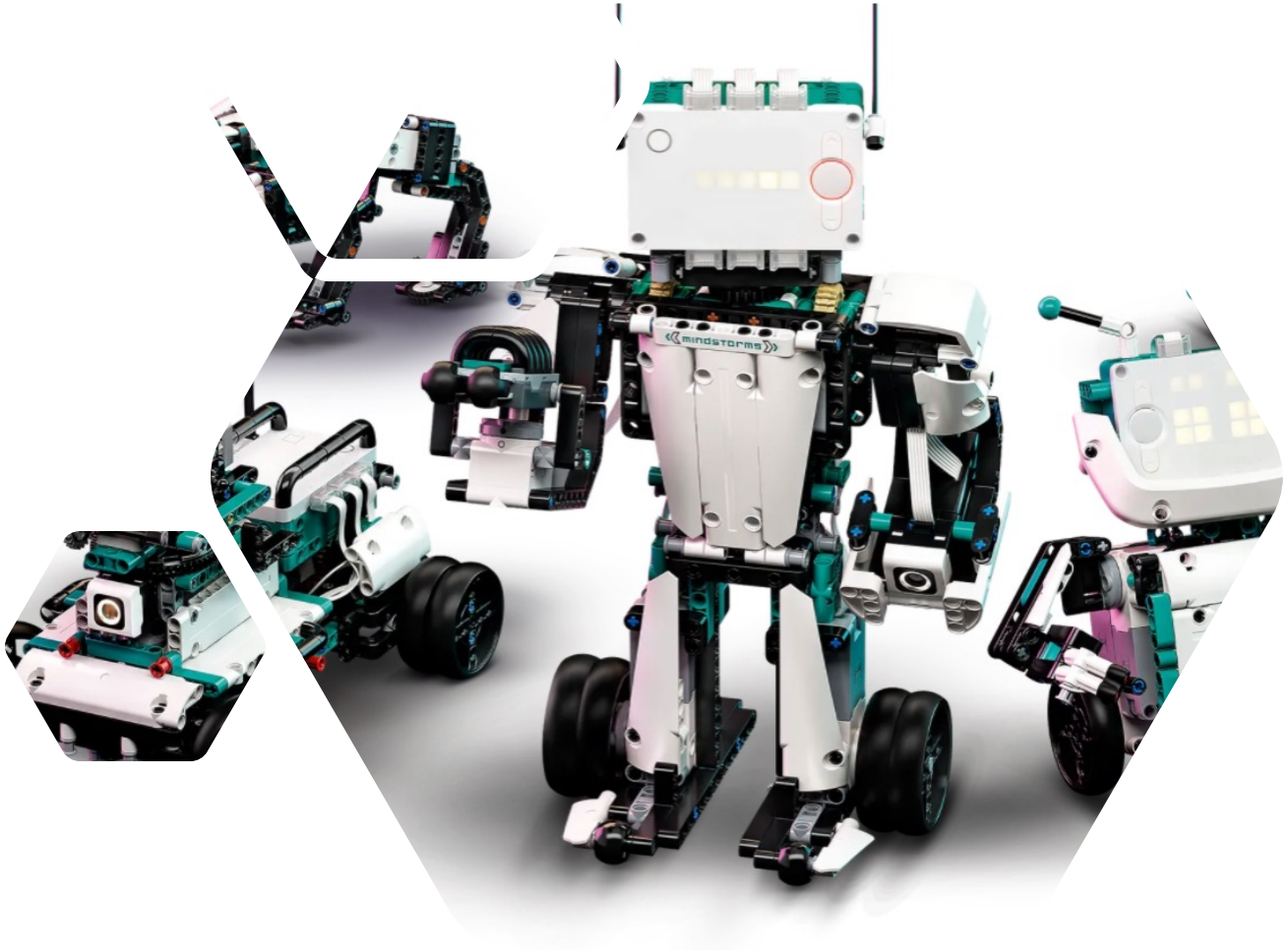
SPIKE PRIME vs ROBOT INVENTOR

SANJAY & ARVIND SESHAN

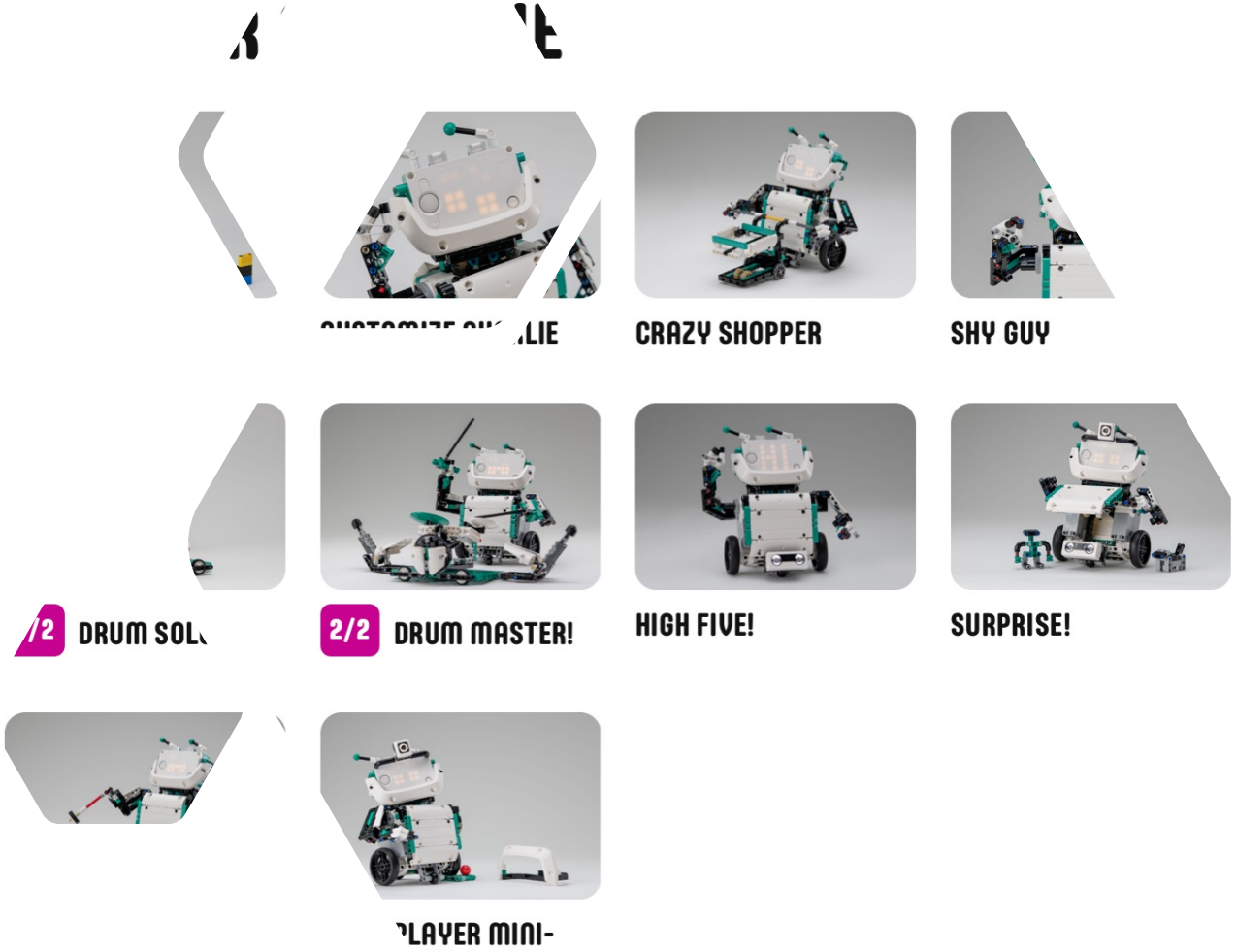
OVERVIEW

- Five built-in models with instructions
- Custom blocks for those models
- Free programming area



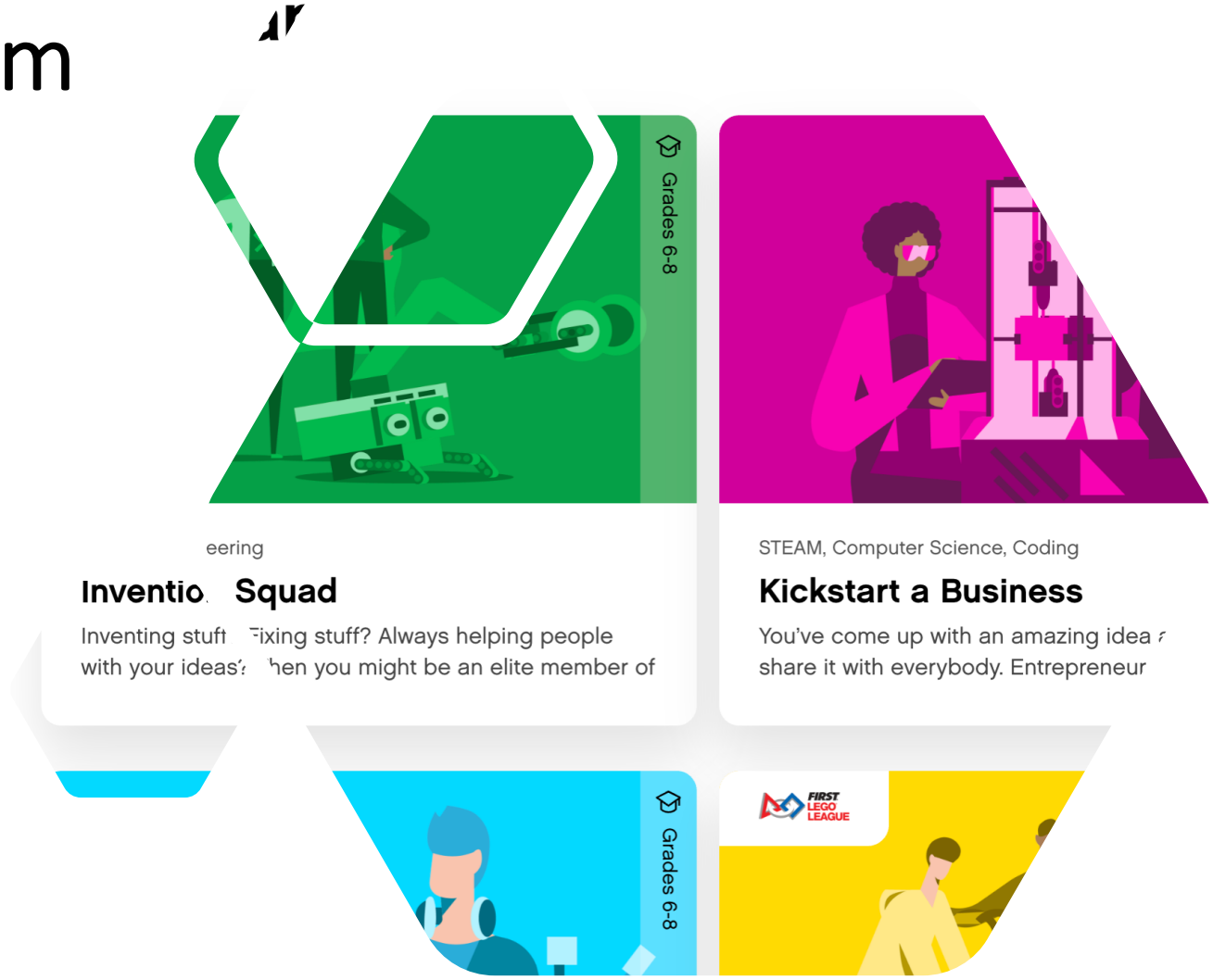
51515 IS PROJECT-BASED

- Software walks you through building 5 large main models
- “Further Activities” expand on all the models
- Activities incorporate sensors
- Focus is on home learning and play



SPIKE Prime: Classroom Activity Based

- Software takes you through 5 Units that have smaller models and guided lesson plans that can be completed in smaller classroom sessions
- Includes a “Competition Ready” Unit for FIRST LEGO League teams (required Expansion set)



SPIKE™ Prime

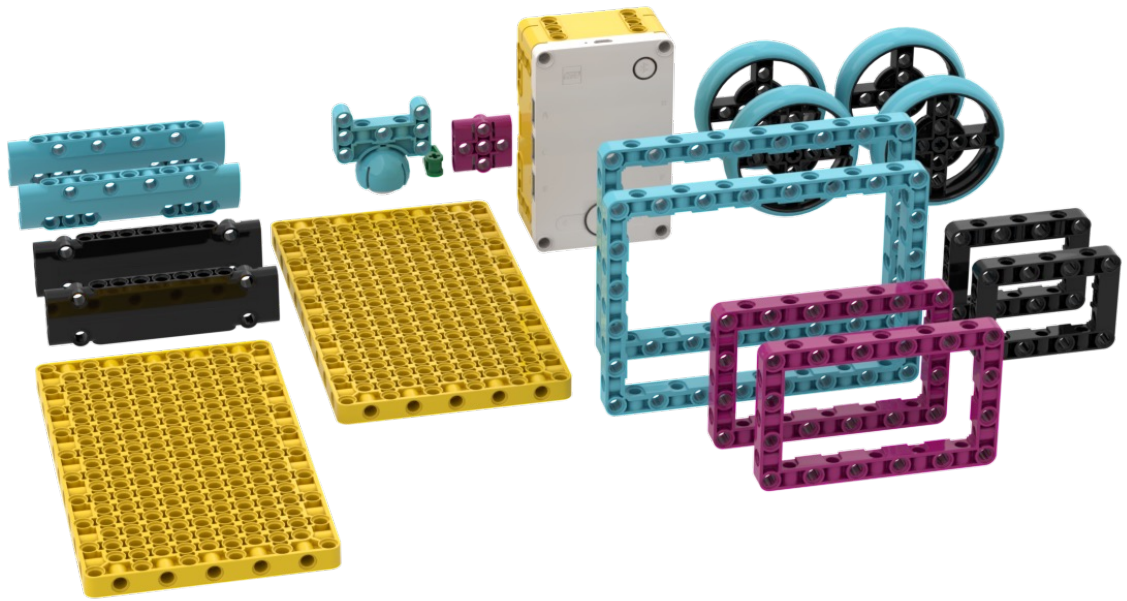
- 6 universal ports
- Powered-up cables
- 5X5 LED Matrix
- Yellow
- Bluetooth and USB
- **Sensors:** Distance 1, Color Force, built-in 6 axis gyro and accelerometer
- Distance Sensor with break-out interface
- **Motors:** 2 medium; 1 large (light azure)
- Storage Box

MINDSTORMS

- 6 universal ports
- Powered-up cables
- 5X5 LED Matrix
- Teal
- Bluetooth and USB
- **Sensors:** Distance, Color, built-in 6 axis gyro and accelerometer
- Distance Sensor with break-out interface
- **Motors:** 4 medium (light grey)
- No Storage Box

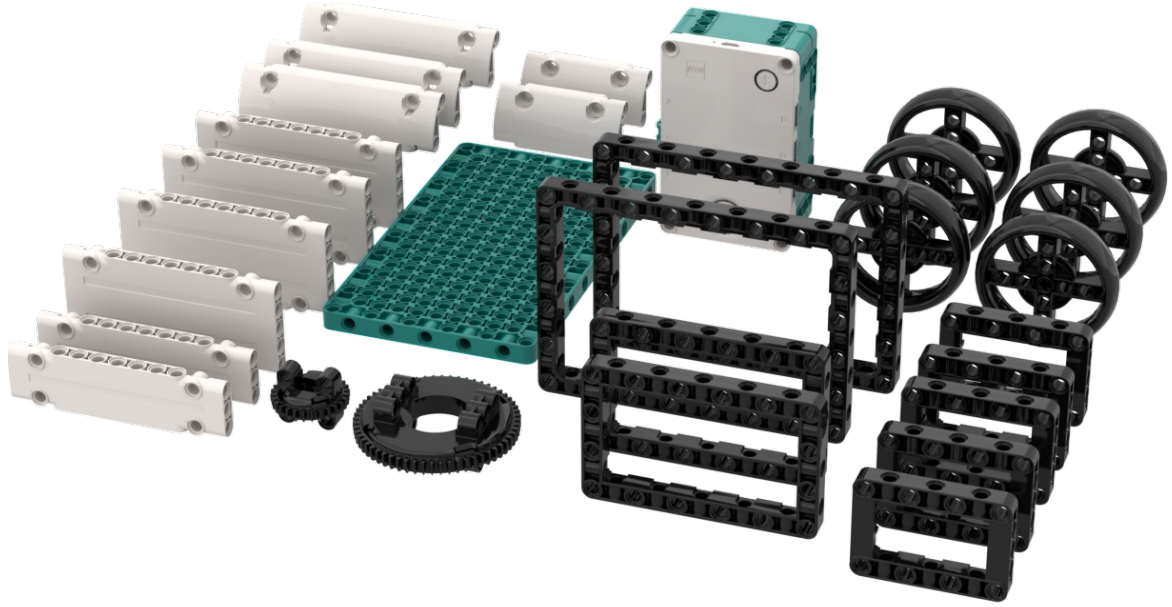
SPIKE™ Prime

- 523 parts
- Caster wheel



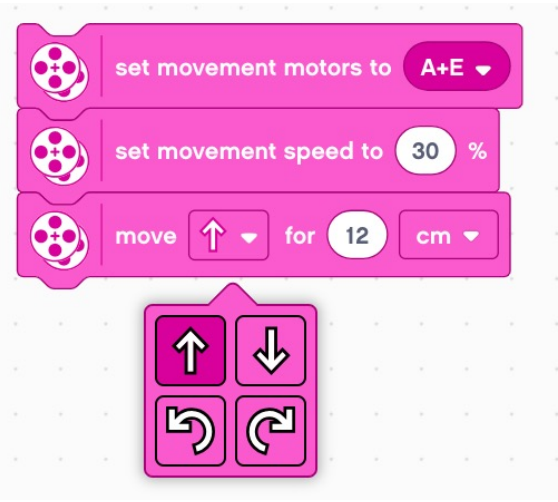
MINDSTORMS

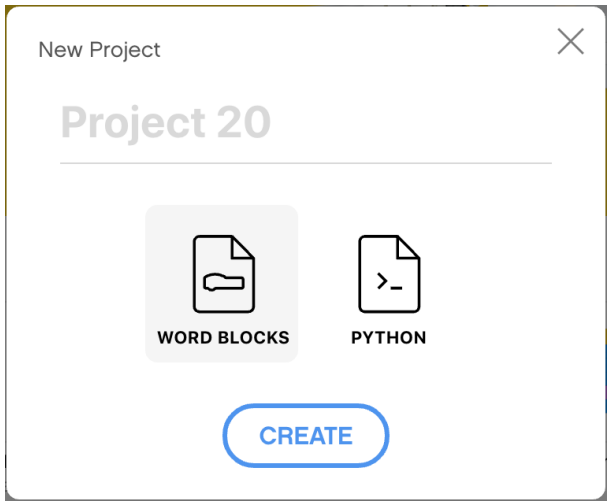
- 949 parts: More wheels, frames, and panels
- New differential gear



SPIKE™ Prime

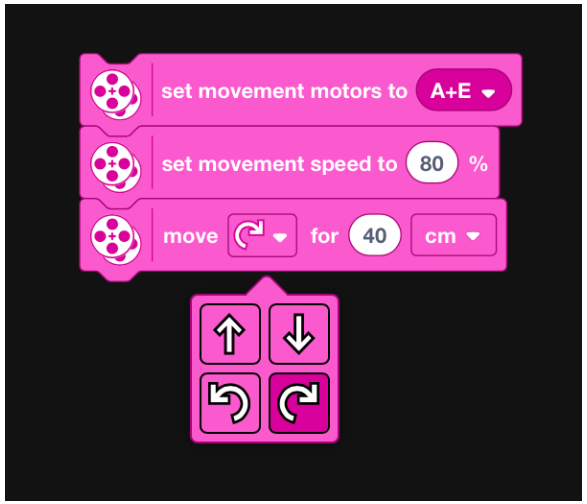
- Word Blocks and Python
- Light Background
- No remote control
- No custom blocks for models
- Extensions to add more blocks
- No hub-to-hub communication
- No machine learning

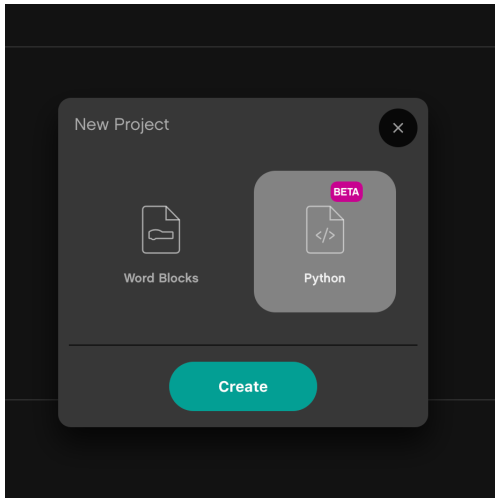




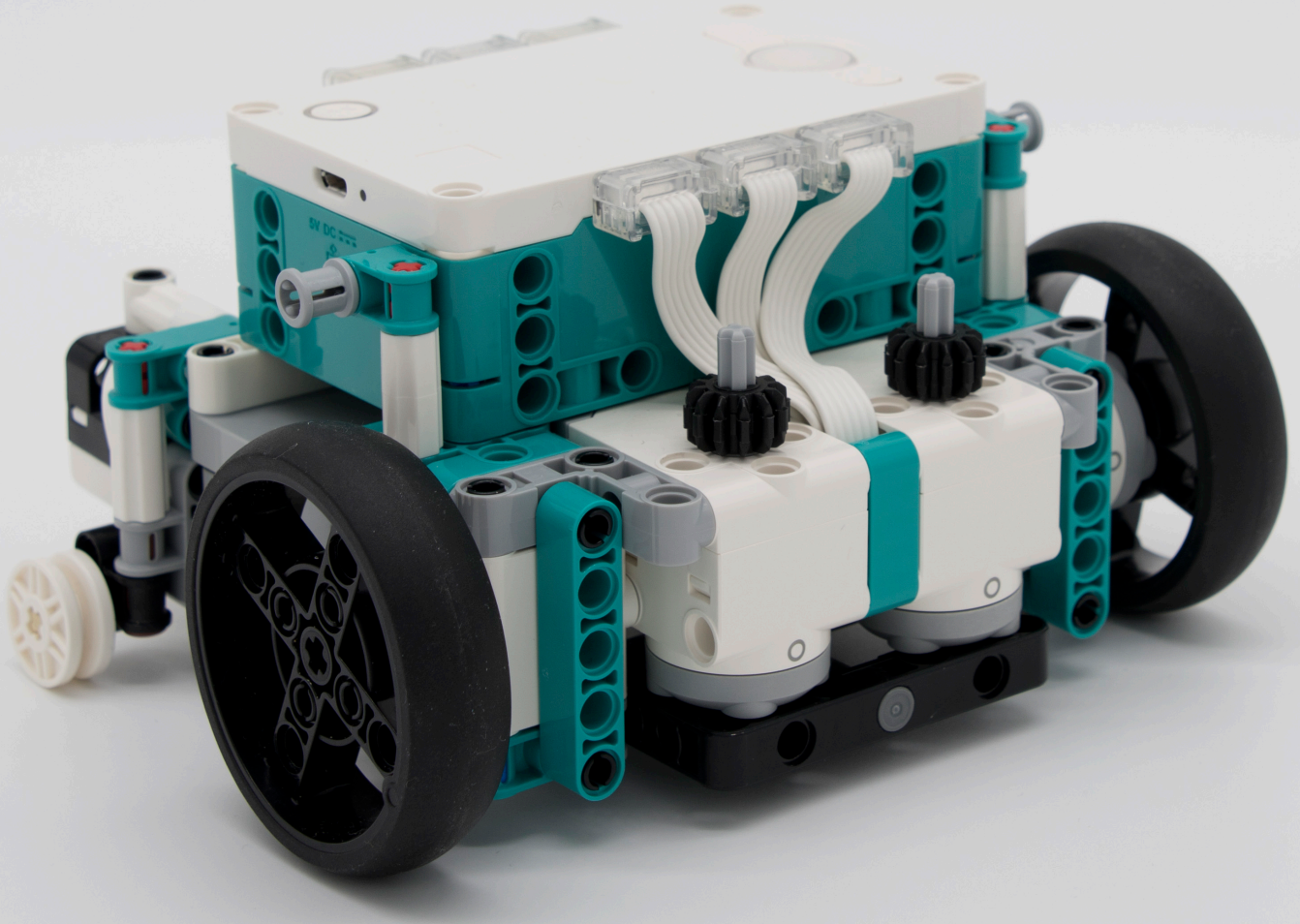
MINDSTORMS

- Word Blocks and Python
- Black background
- Remote Control application
- Custom Blocks for main models
- Extensions to add more blocks
- Hub-to-Hub Communication
- Machine Learning

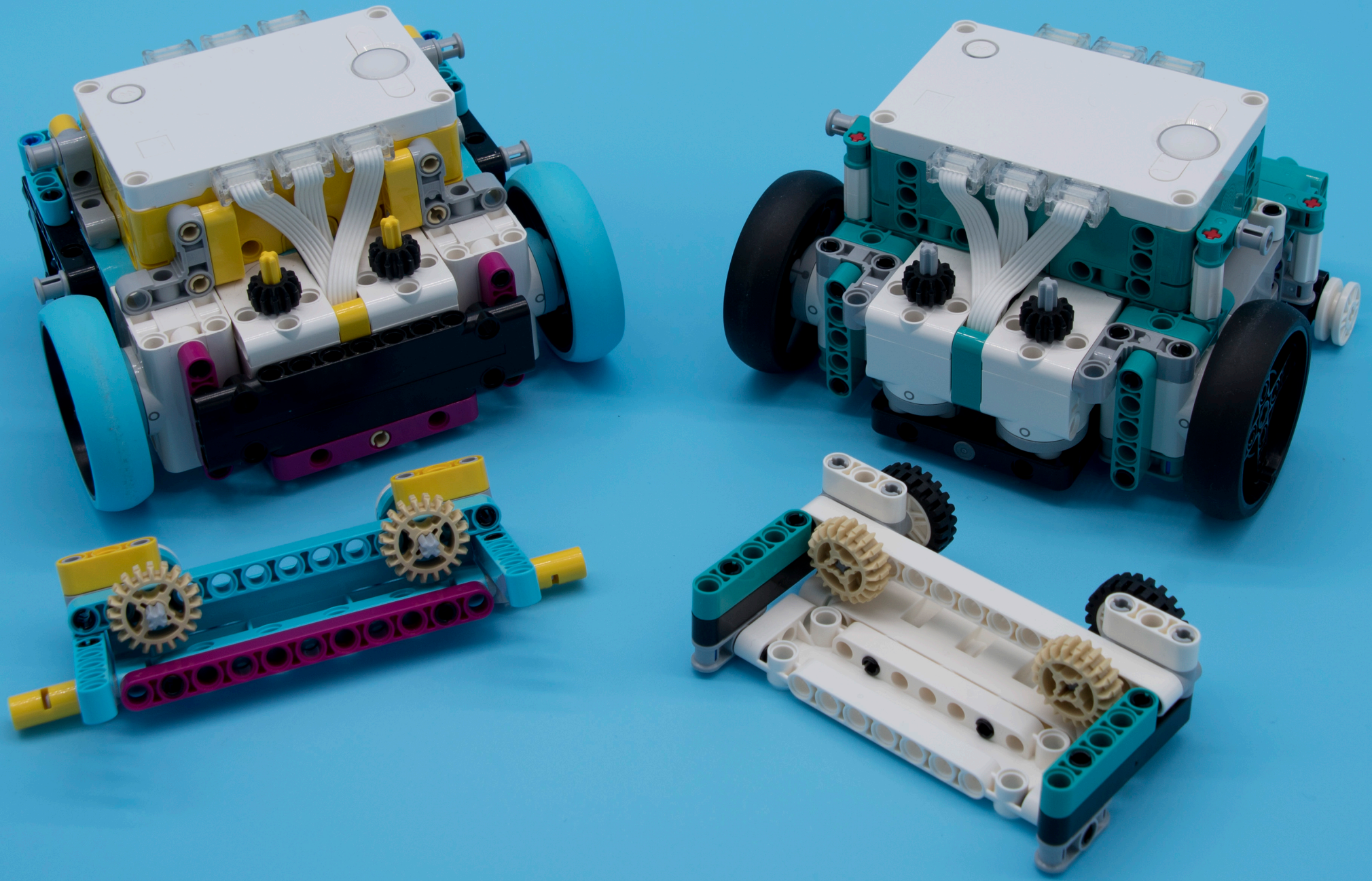


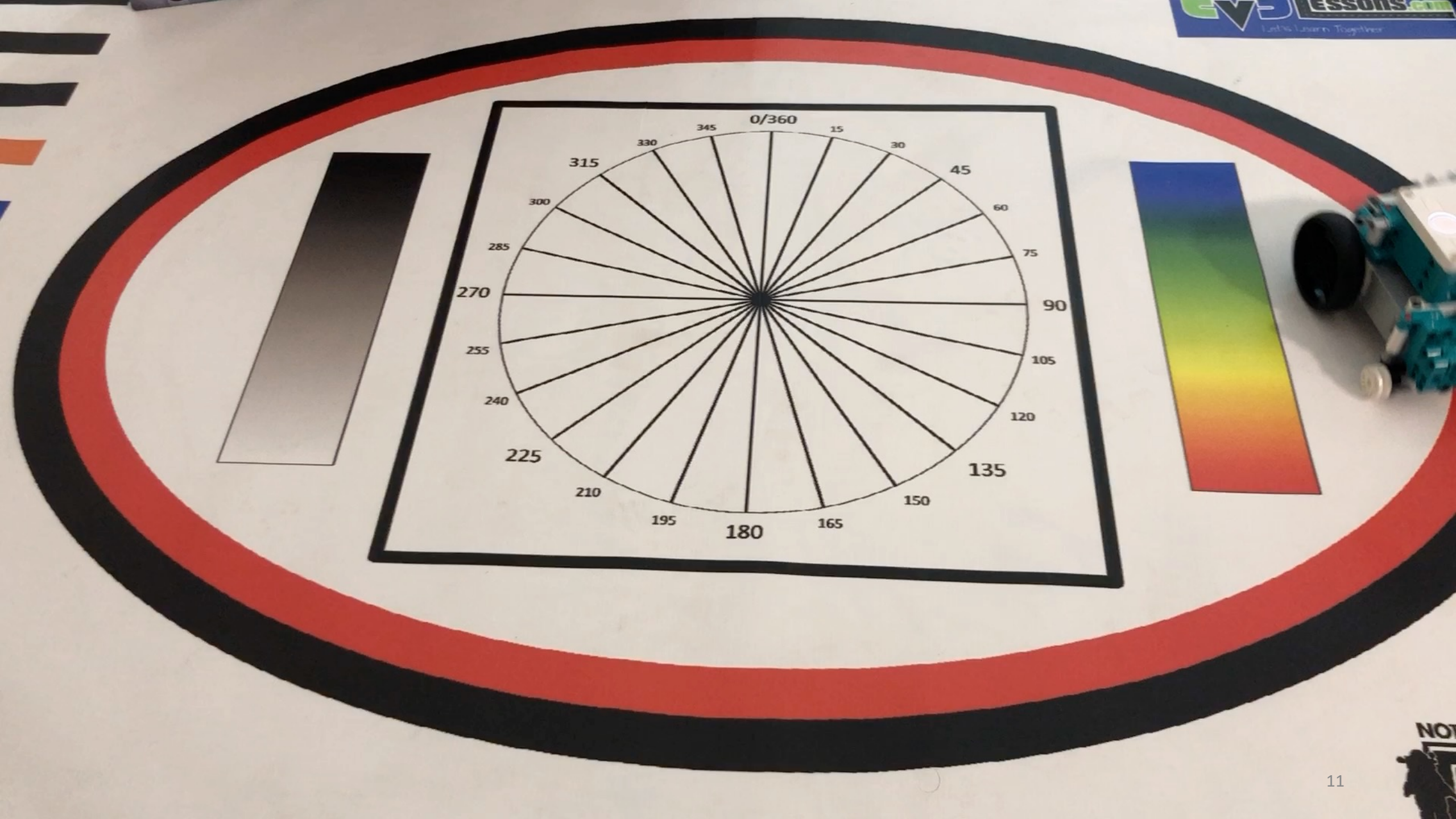


CAN YOU BUILD A COMPETITION ROBOT?



Robot Inventor is allowed in FIRST LEGO League Challenge starting in the RePLAY season.

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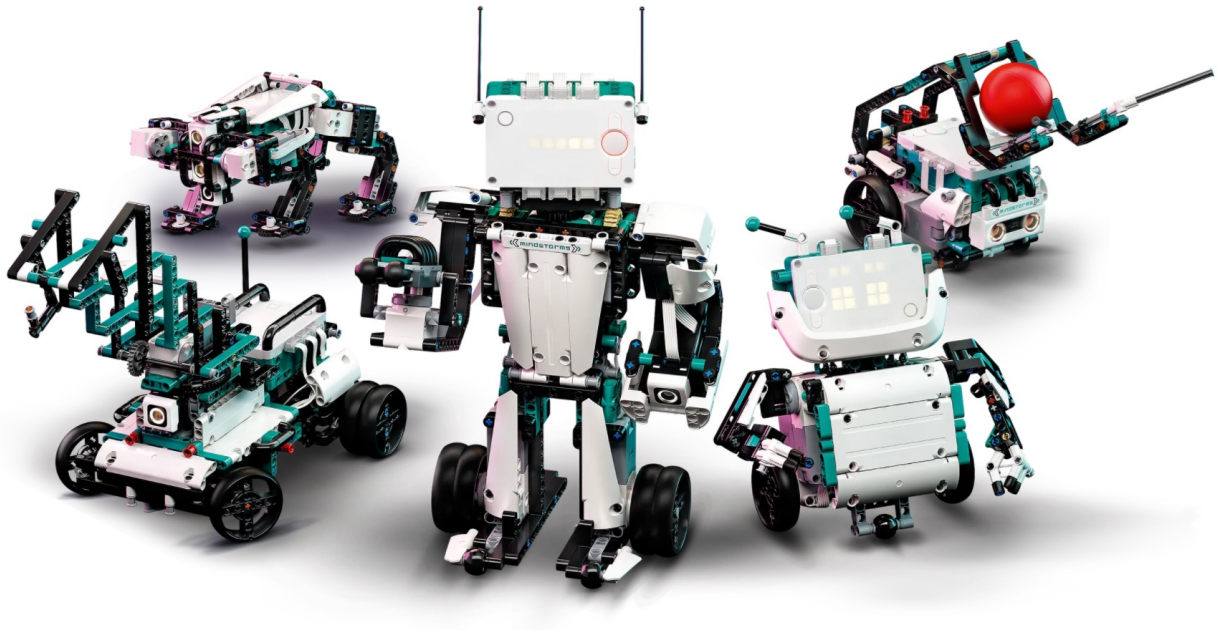
345

FAQs

- Can you use a SPIKE Prime large motor in a MINDSTORMS Hub?
  - Yes
- Can you use MINDSTORMS motors/sensors on a SPIKE Prime Hub?
  - Yes
- Can you convert a SPIKE Prime into a MINDSTORMS Hub or the reverse?
  - You were able to run either firmware on either Hub when using SPIKE 2. As far as we know, Robot Inventor is currently not supported in SPIKE 3.
- Can you convert a program from SPIKE Prime to MINDSTORMS or the reverse?
  - You can change the extension of a SPIKE Prime 2 Program (.llsp) and have it open in the MINDSTORMS App. This has not be been confirmed with a .llsp 3 (SPIKE 3) file.
- Is Robot Inventor still available?
  - The Robot Inventor MINDSTORMS set was retired at the end of 2022

CONTACT US



Watch:
https://youtu.be/SxmeodiGyRc

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