RULES
Design and build a hovercraft that can navigate different terrains.

Device Specs
- Max size: 16 inch x 16 inch footprint
- Height: Must fit through tunnel
- Payload: 5 unmodified U.S. Quarters
  High school quarters must be in a stack
- Batteries: AA, AAA, C or D
- Voltage: 12 volts (12V) or less per circuit

Test Rig
- Tracks A and B only
- Sandpaper
- Carpet
- Pegboard A
- Pegboard B
- Curbs (on all three tracks)
- Track C

Device Performance
- 5 runs
- Between runs teams can:
  - Re-orient device
  - Restore power source
  - Make simple repairs

Tracks A and B only (TILT)
- Tilt height

YOU

YOU

sandpaper
carpet
peg board A
peg board B
Curbs (on all three tracks)
Track C

NO TILT
2019 Tech Challenge Safety Guidelines

**DO**

- **Wear protection**
  ANSI-approved goggles and close-toe shoes must be worn while testing.

- **Listen and be alert**
  Pay attention and follow the judges’ directions.

- **Have a Safety Officer**
  Identify one student to oversee safe design and implementation.

- **Transport safely**
  You must have a safe way to transport your device without help.

**Don’t**

- No flammable liquids or gases
- No pressurized gases > 5 psi
- No animals
- No horseplay
- Don’t ignore safety labels
- No climbing

### Spirit of the Challenge

When building your device, ask yourself: how would it work in real life? Judges will look to your team’s engineering journal for evidence of real-world application.

Additionally, be creative and resourceful! The best devices are ones you build yourself and not buy in a store. While use of existing plans for reference and inspiration is allowed, all plans, and the source of those plans, must be documented in the engineering journal.

### Engineering Journal

Keep a journal to document everything you do. Journals will be seen by judges when you are not around so be clear!

*Don’t forget to read the full rules at challenge.thetech.org.*