How do you make an accelerometer?
- Gyro?
- Micromotor
- Micro robot?

How do they work?
- Physics
- What is the design space (limits & tradeoffs)?

Manufacturing process
- Materials & properties
- Cross sections, layout → 3D view
- Design rules

Layout is drawing colored polygons on a computer
- Black
- Red

Each color gets turned into a glass mask
- Mask is binary: opaque & clear areas

In this example red polygons turned into opaque areas
Simplest accelerometer

Buy a silicon on insulator (SOI) wafer

Do 1 masking lithography step

Do 1 silicon etch, "deep reactive ion etch" (DRIE)

Spin polyimide resist

Exposure through mask

Develop

DRIE SOI

Stop resist

Spin polyimide etch

Variable mass

Rocks anchor

Oxide after etch