3.1.2

What do we need to navigate?

Mohamed Baioumy

What do we need to navigate?

- Navigation is not just for robots!

What do we need to navigate?

- Navigation is not just for robots!

- Assume we're pirates, and we're looking for a treasure.
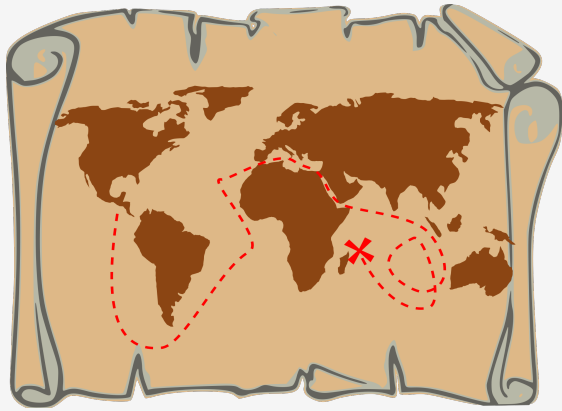
- We have a crew, a ship, and a parrot.

Mohamed as a pirate

What do we need to find a treasure?
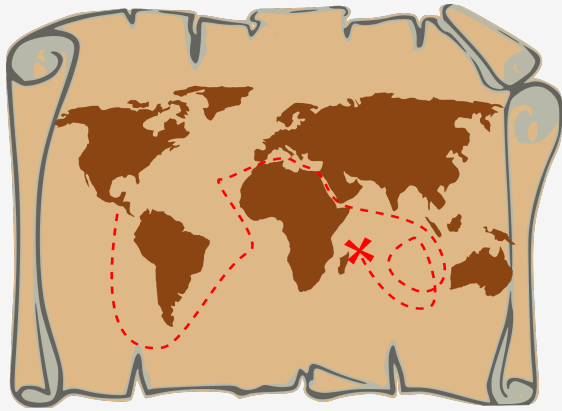
What do we need to find a treasure?

Source: Wikimedia Commons

A (treasure) map

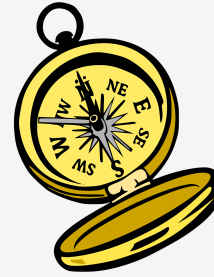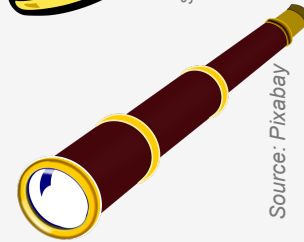# What do we need to find a treasure?

Source: Wikimedia Commons

A (treasure) map

Source: Freestockphotos
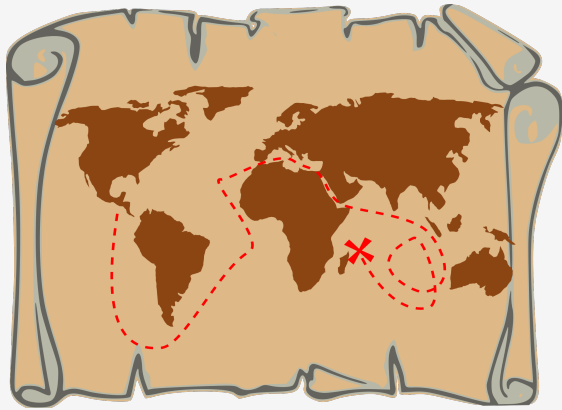
Source: Pixabay

Where we are

What do we need to find a treasure?

Source: Wikimedia Commons

A (treasure) map

Source: Freestockphotos

Source: Pixabay

Where we are

Source: Pixabay

A route to take
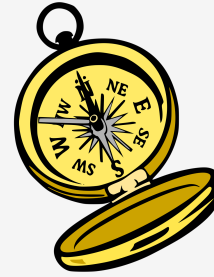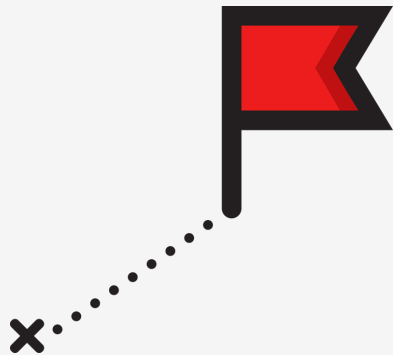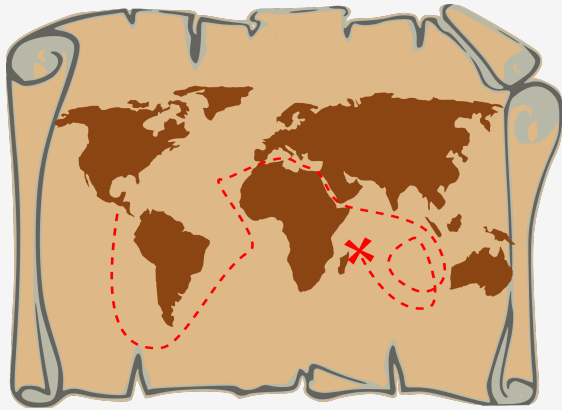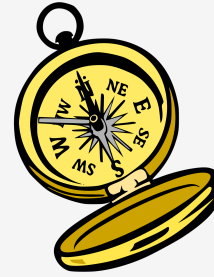
What do we need to find a treasure?

Source: Wikimedia Commons
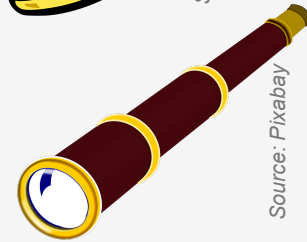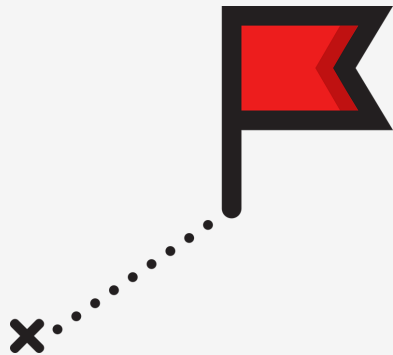
A (treasure) map

Source: Freestockphotos

Source: Pixabay

Where we are

Source: Pixabay

A route to take

Source: Pixabay

Avoid distractions and obstacles

Pirates

Treasure map

Where we are

A route

Avoid obstacles

Pirates	Robots
Treasure map	Map of the environment
Where we are	Localization
A route ⟷	Path planning
Avoid other ships	Obstacle avoidance