

Classroom Rocket Scientist

Beginner (KS2) version

1. Pick satellite type

Select your type of satellite

Navigation Satellite

Help people find their way



Communication Satellite

Help people communication with each other



Earth Observation Satellite

Monitor the Earth



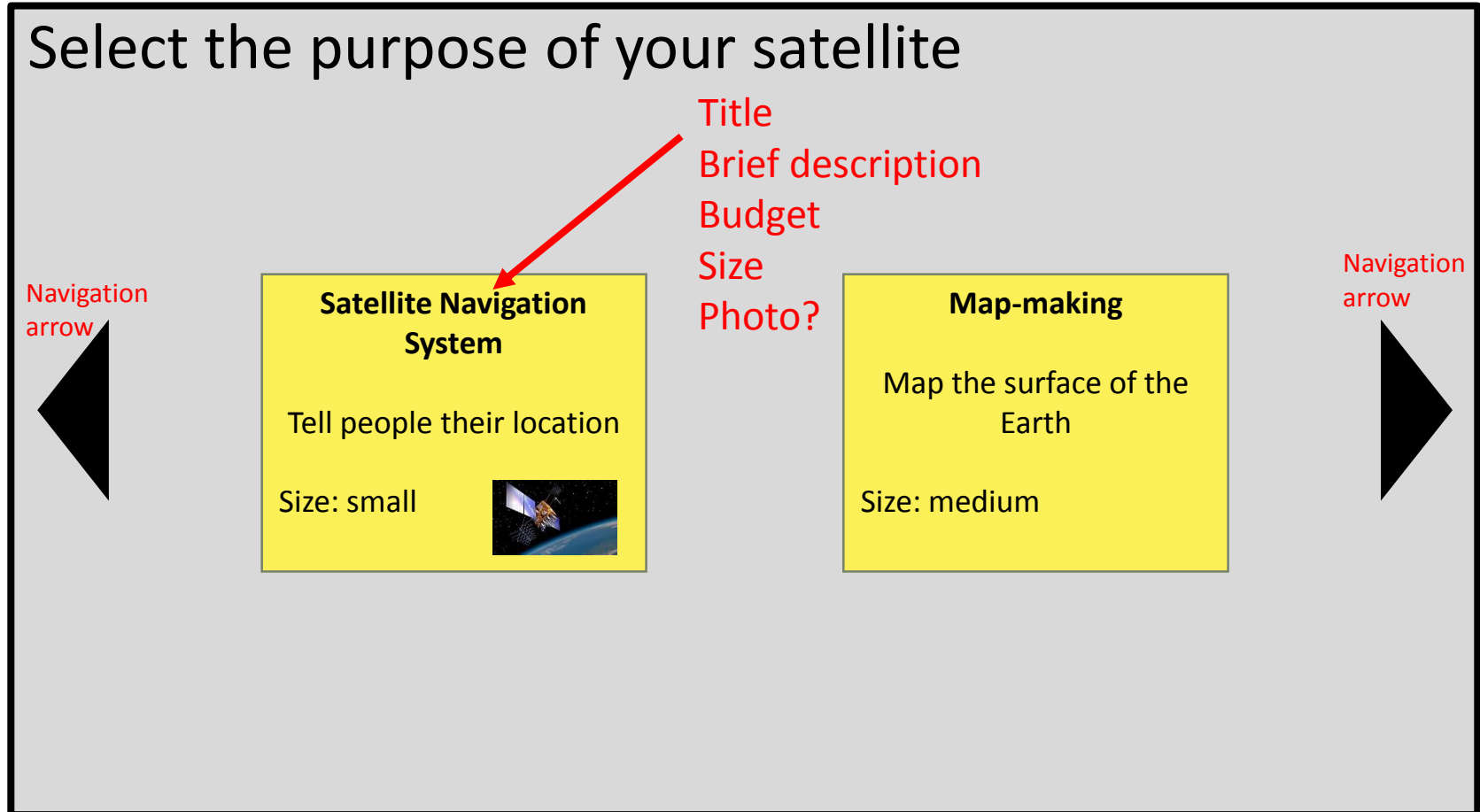
Colour coded
(changeable
pallets for colour-
blind etc.?)

Title
Brief description
Icon

Navigation
arrow



2a. Pick a goal/objective (Nav)



2b. Pick a goal/objective (Comms)

Select the purpose of your satellite

Same as above (different colour?)

Same as above
(different
colour?)

**Satellite telephone
system**

Let people talk over the
phone using satellites

Size: small

Satellite internet

Connect to the internet
using satellites

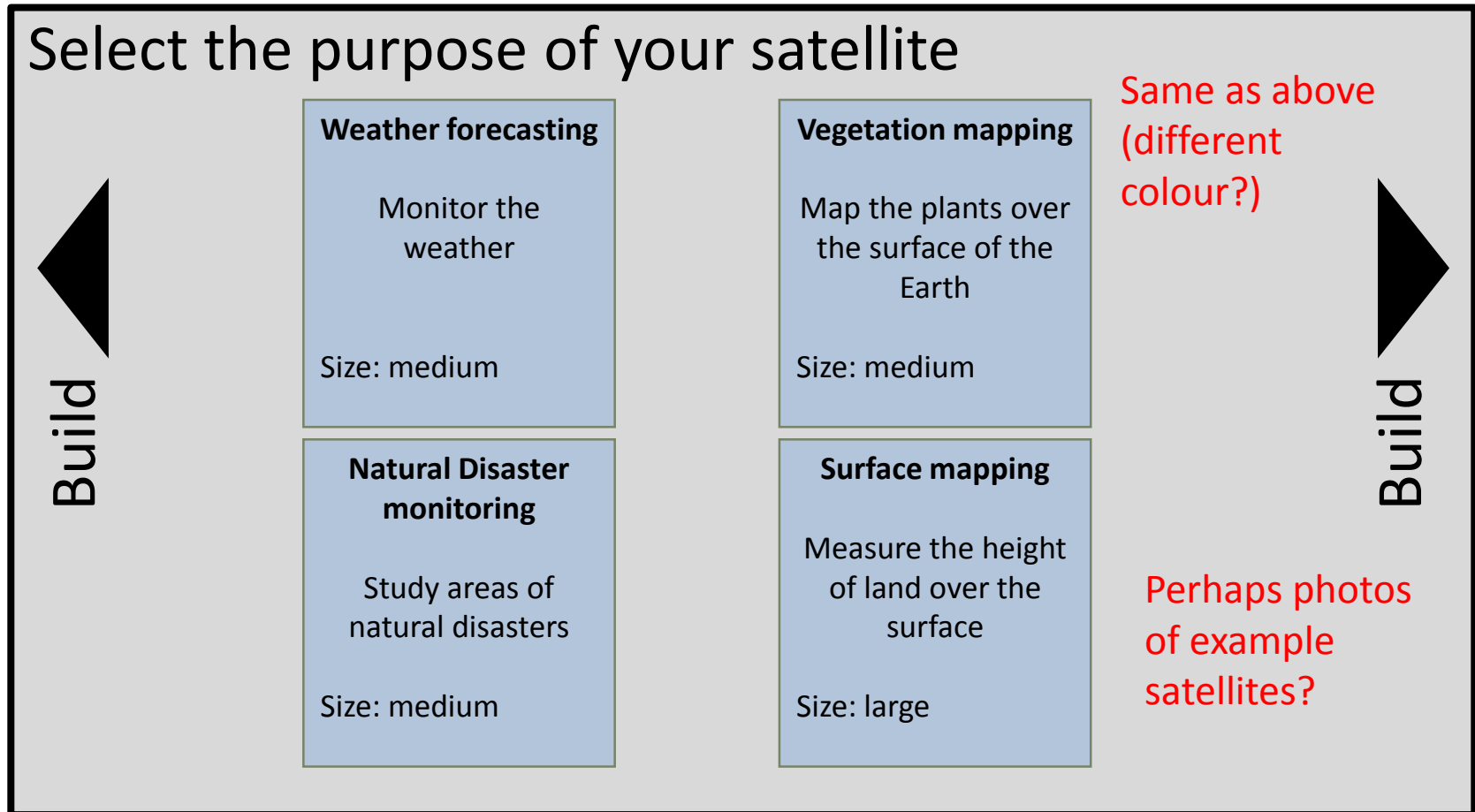
Size: medium

Satellite TV

Provide satellite TV

Size: large

2c. Pick a goal/objective (Earth Obs)



3. Pick satellite size

Not used for beginner– size is dictated by
goal/objectives

4. Orbit

Not used for beginner
Orbit assumed to be LEO

5. Select your instruments

Title depends on selected type

Build your navigation satellite

Graphical schematic of the satellite (size & slots dictated by mission)

"Blocks" for instruments
Spaces for radio dishes etc.

Space available: Large: 1 ; Small: 2

Requirements

- ☒ Take pictures of the Earth
- ☐ Radio dish to communicate
- ☐ Requirement 3...

Requirements not met

Warning visible when requirements not met.

Choose your instruments

Camera

Size: S

Icon, Cost, Size

Large Radio dish

Size: L

Allows communication with the ground.

Show/hide more info

Navigation only shows if all requirements met

Video camera

Size: S

Restart

Power

6. Select power

Add your solar panels

The diagram illustrates a rocket build interface. On the left, a large black arrow points left, labeled 'Build'. On the right, a large black arrow points right, labeled 'Rocket'. In the center, a rocket body is shown with a central module containing a battery icon and a camera icon. To the left of the central module is a row of four solar panels: two solid blue panels and two dashed white panels. To the right of the central module is another row of four solar panels: two solid blue panels and two dashed white panels. Below the left row of solar panels, the text 'Solar panels:' is followed by a white box containing the number '4', and two small boxes with '+' and '-' signs. A red callout box on the right side of the interface contains the text 'Only shows if all requirements met'.

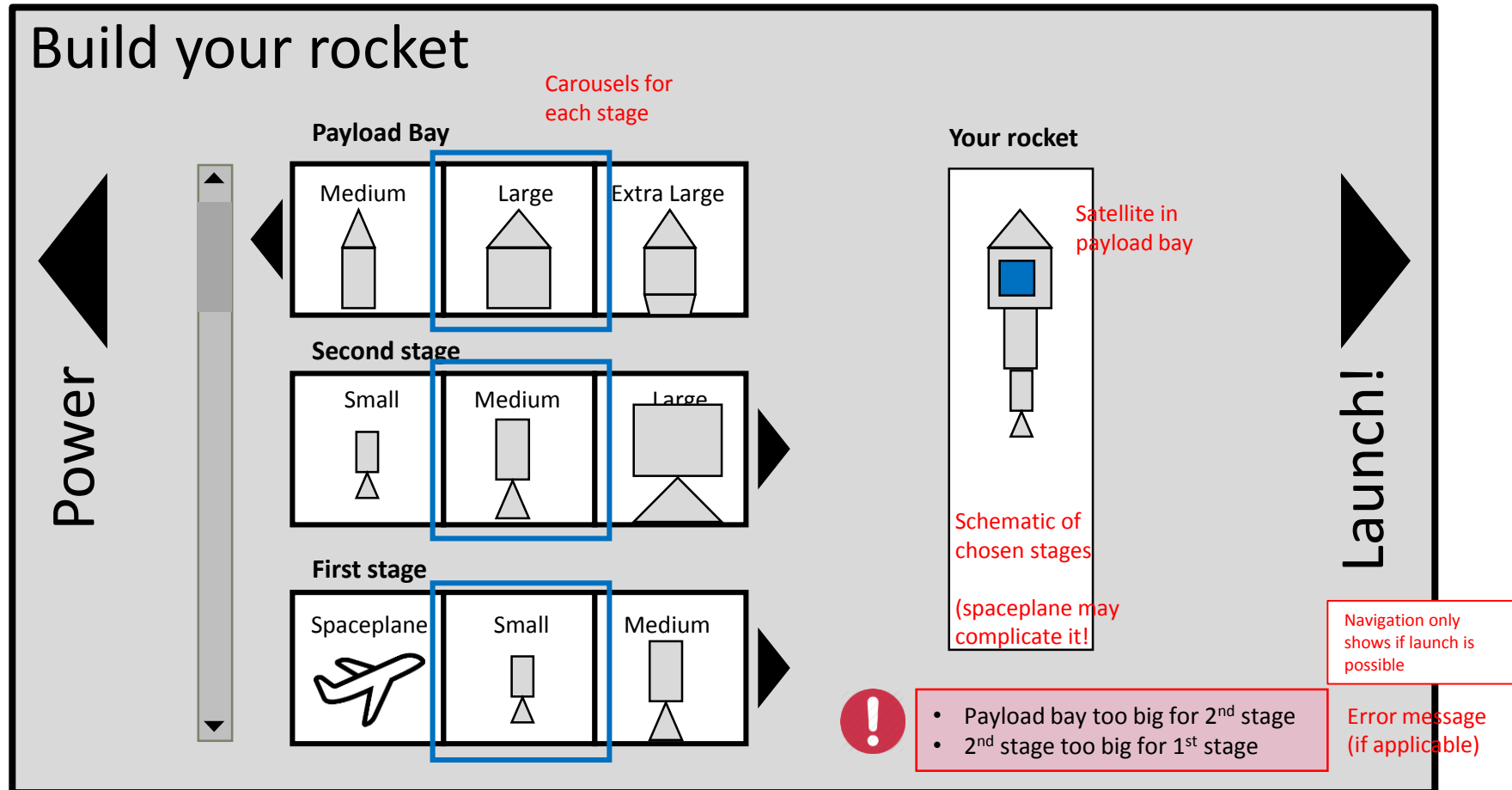
Build

Solar panels: 4 + -

Rocket

Only shows if all requirements met

Carousels for each stage



8. Launch

Launch!



Animation of
launch. With
stages
dropping off?

Congratulations! Your satellite is now successfully
providing an internet service to Europe!