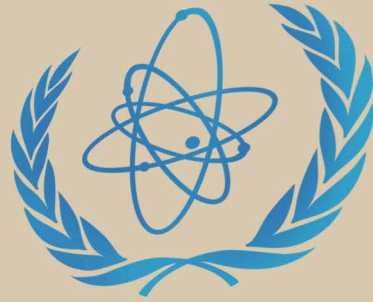


# 1. SEED PREPARATION



Two seed types:  
Arabidopsis and  
Sorghum are  
selected ...



IAEA

and sent from the  
Joint FAO/IAEA centre  
laboratories in Seisbendorf  
Austria, to Virginia  
USA.



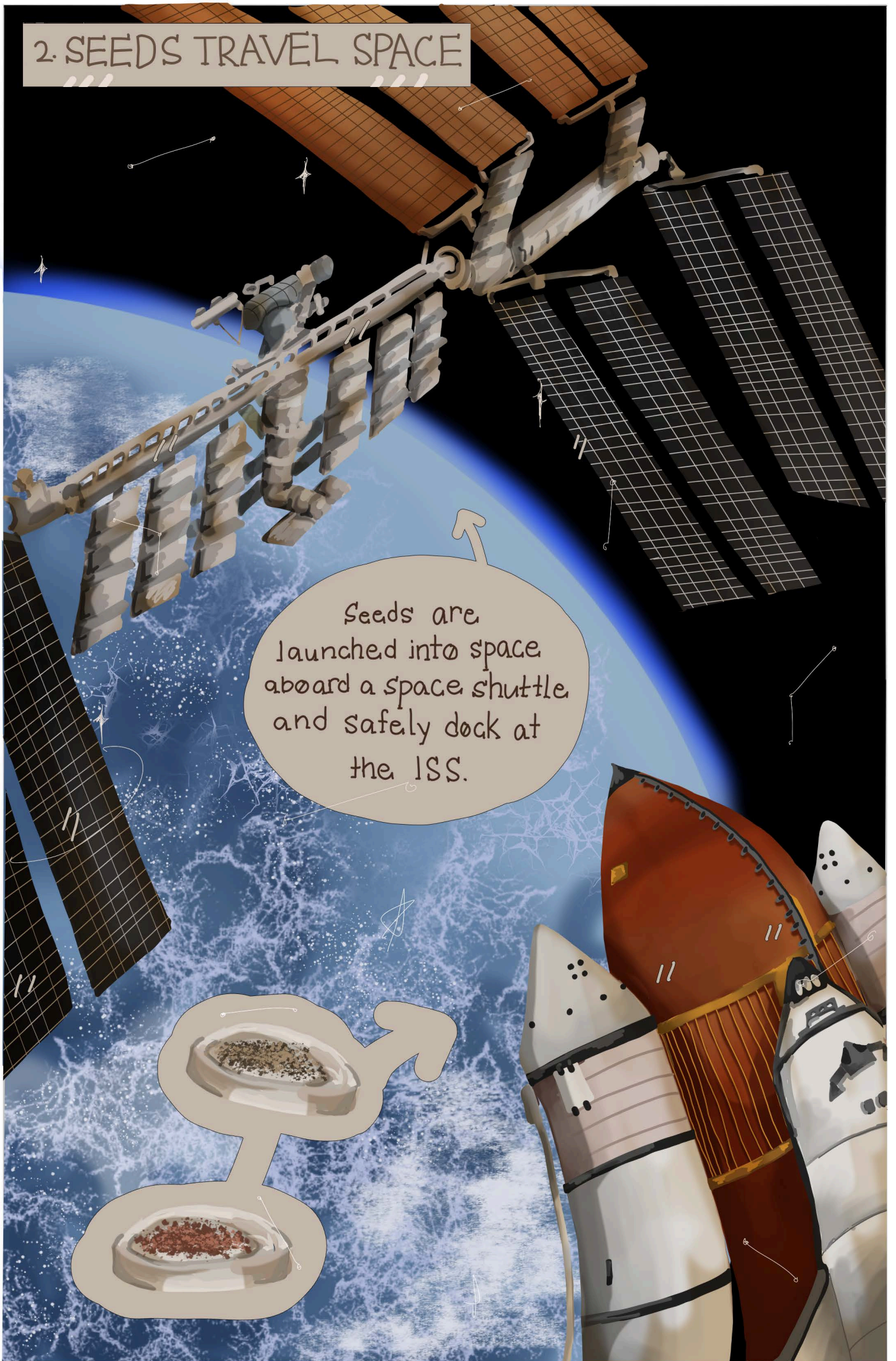
One batch remains  
in the Joint FAO/IAEA  
Centre laboratories  
to be irradiated  
in a machine.





## 2. SEEDS TRAVEL SPACE

Seeds are launched into space aboard a space shuttle and safely dock at the ISS.

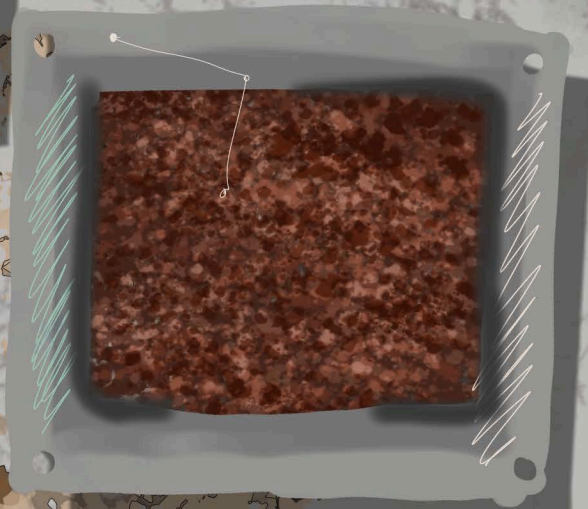
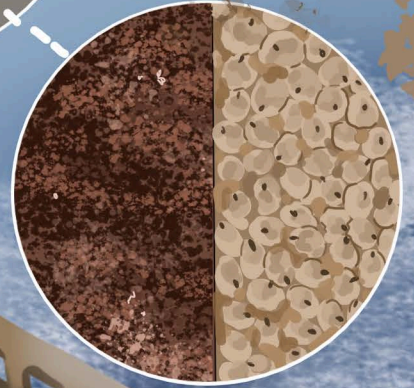
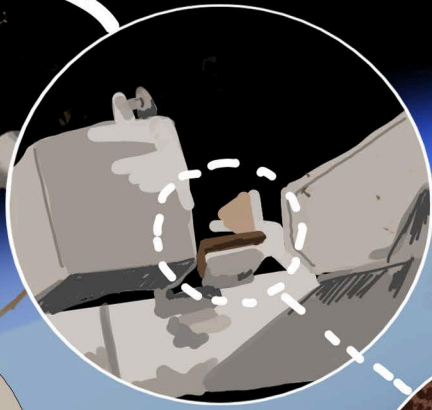




### 3. SPACE EXPOSURE

Half of the space seeds are positioned out of the ISS and is exposed to cosmic radiation, microgravity, and the extreme temperatures in space.

The other half stays inside the ISS.





#### 4. SPLASHDOWN

All seeds  
return from  
space . . .

and travel  
back to the  
Joint FAO/IAEA  
centre laboratories.





## 5. ANALYSIS and GROWTH

BATCH 1    BATCH 2    BATCH 3



The DNA of seedlings from all 3 batches of seeds is analyzed and compared to look for any differences in the mutations.

**(BOTH INSIDE & OUTSIDE OF ISS)**

Then the seeds are grown in greenhouses in Seibersdorf and their differences noted.





## 6. RESULTS!

The space plants grew, even if it's highly exposed to sunlight.

AHA!

Scientists discovered that the plants possessed DNA that have the capacity to endure the intense heat of the Sun.

They will use the space seeds to alter or modify the Earth's plants ...

to give them the same necessary abilities to withstand Climate change.

