

# Verhuizen naar de maan

Hans Tuinenburg  
ESERO Conferentie Terug naar de maan  
31 oktober 2018

The Netherlands





# maanweetjes

Heel koud  
Draait om de aarde

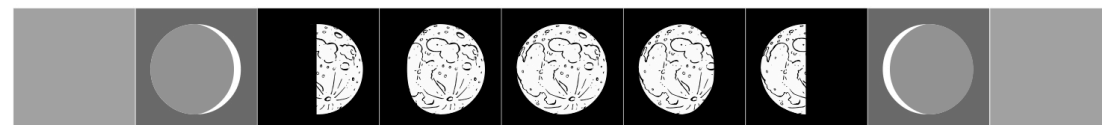
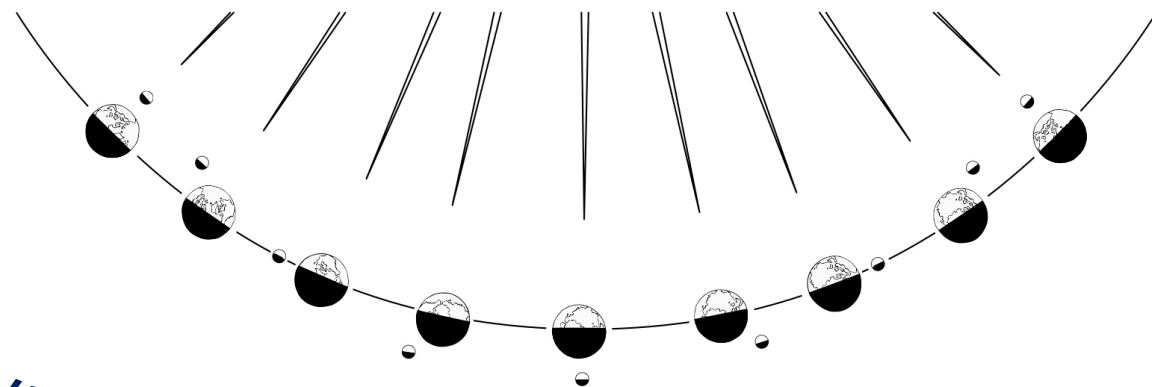
Rotsige bodem  
Verschillende  
verschijningen

Kraters

Geen atmosfeer



Heel warm



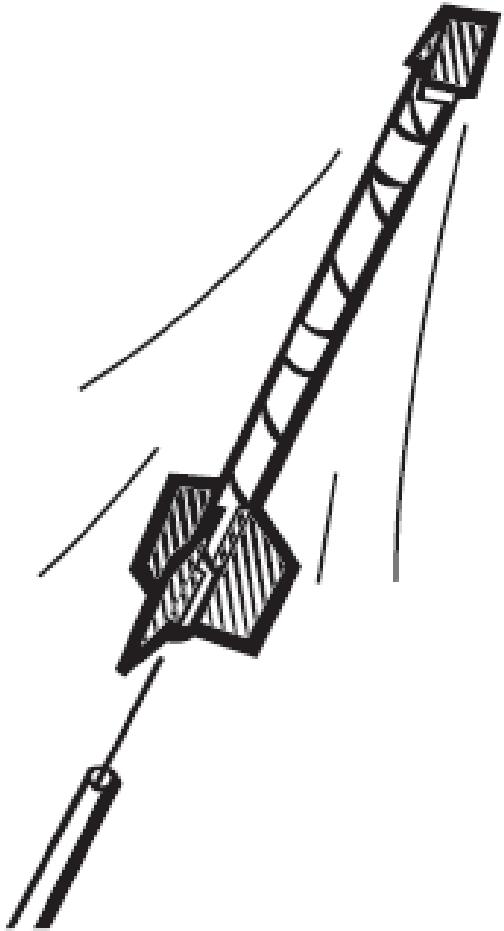
1 2 3 4 5 6 7 8 9

naar  
de  
maan





# bouw een raket



Hoe gaat een  
raket omhoog?



# lanceren



Lift-off





in de  
raket



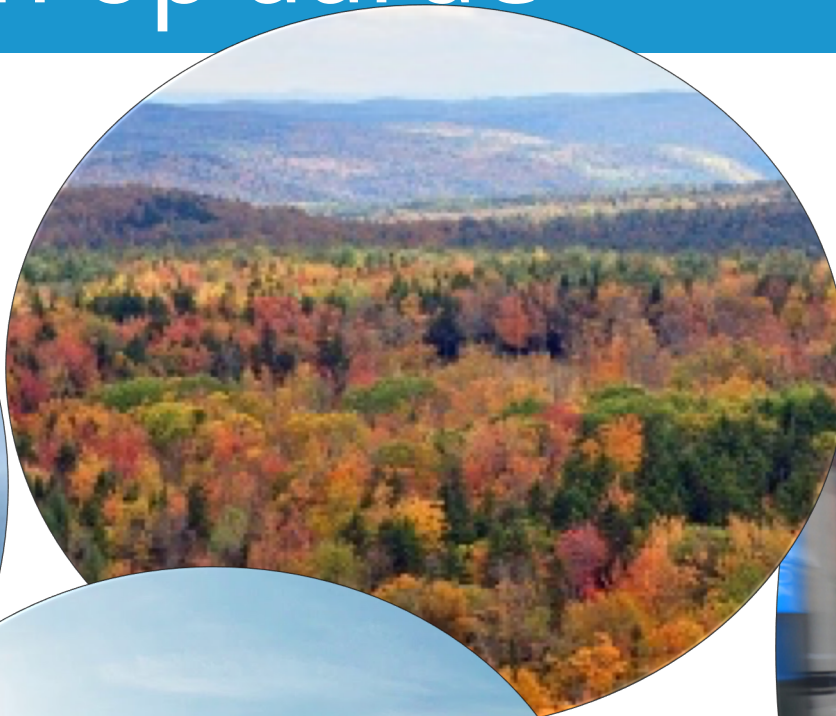
aarde  
versus  
maan





# omstandigheden op aarde

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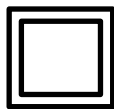


# bescherming

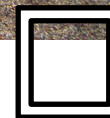




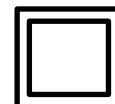
# waar kun je schuilen?



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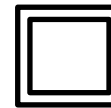
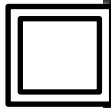
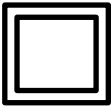
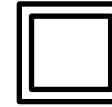
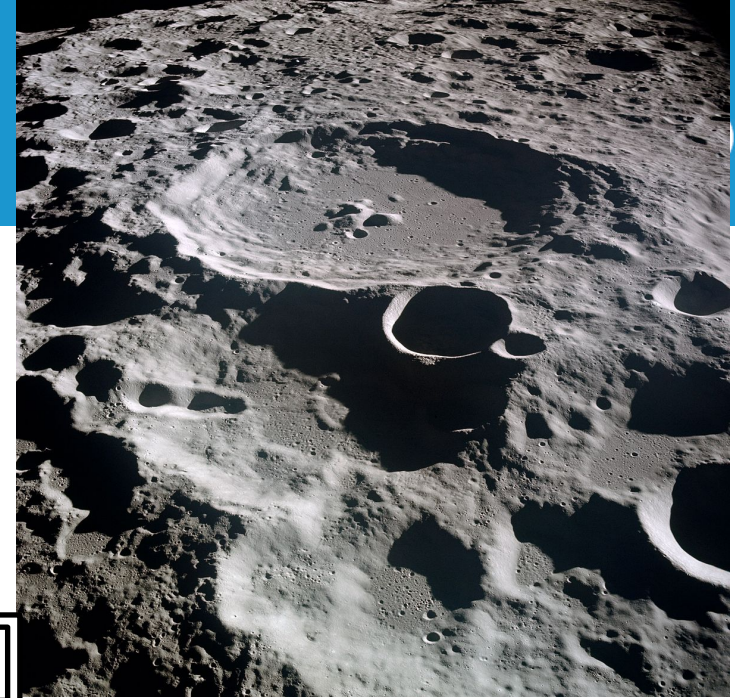
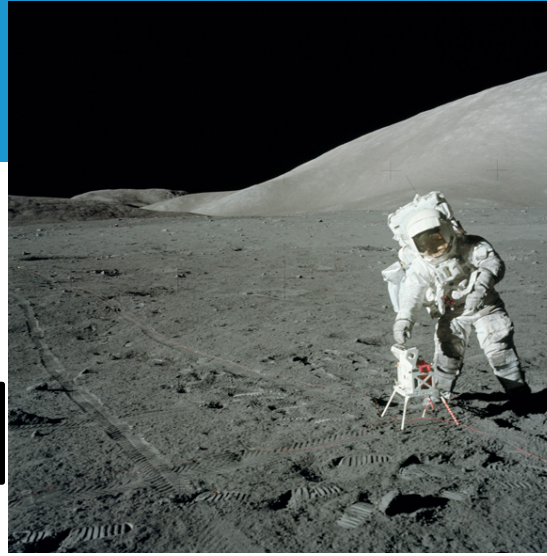
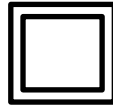
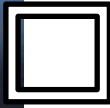


[www.ruimtevaartindeklas.nl](http://www.ruimtevaartindeklas.nl)



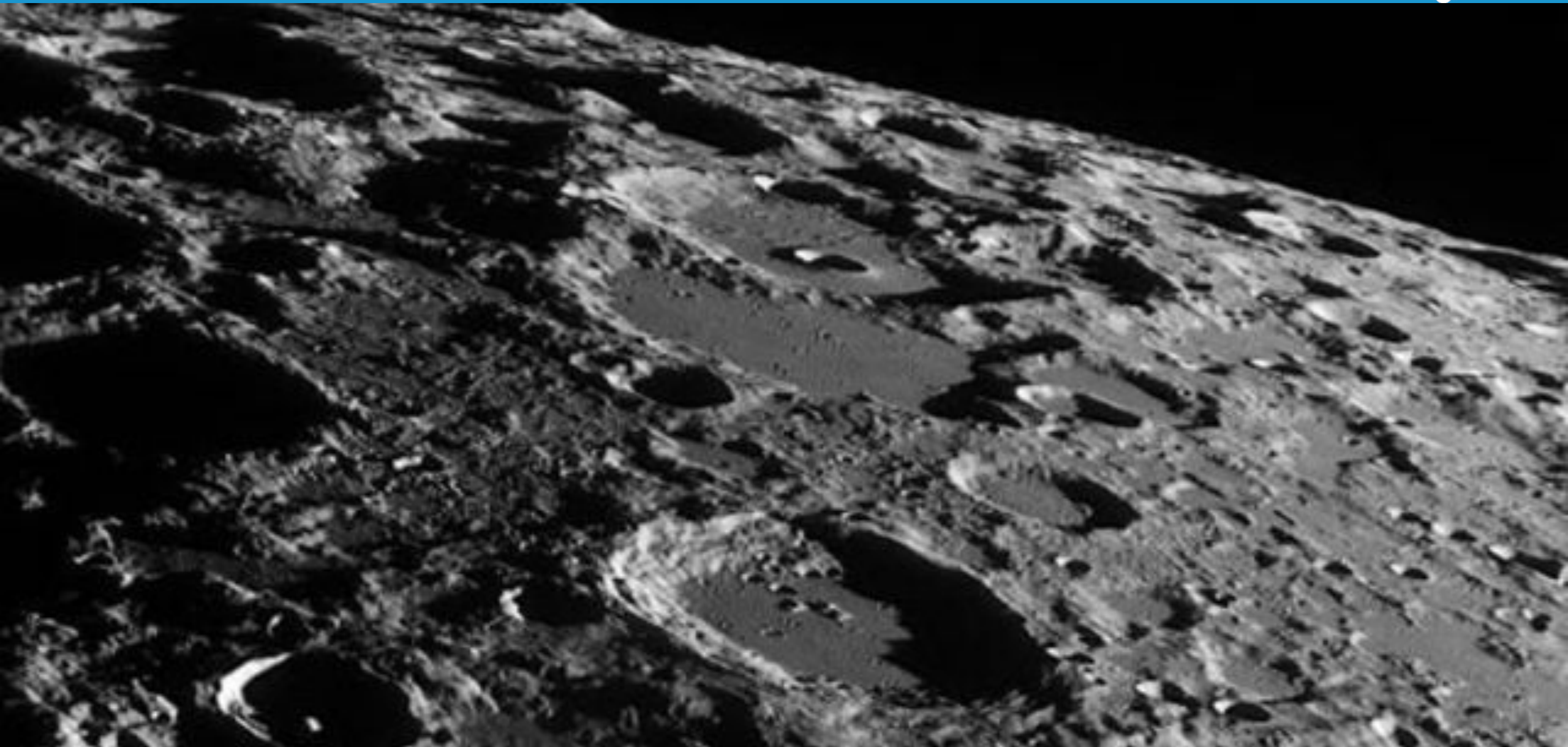


# aarde en maan



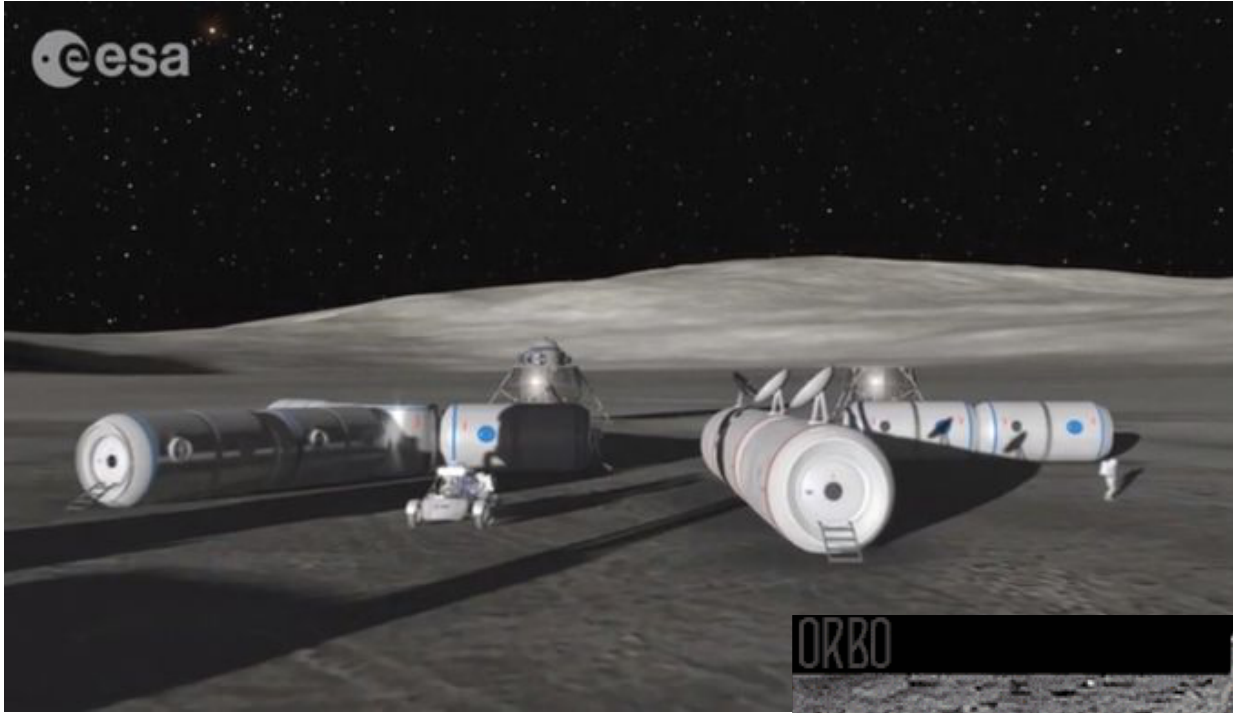


# de maan



# ontwerp een onderkomen op de maan

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# maanweetjes

Heel koud  
Draait om de aarde

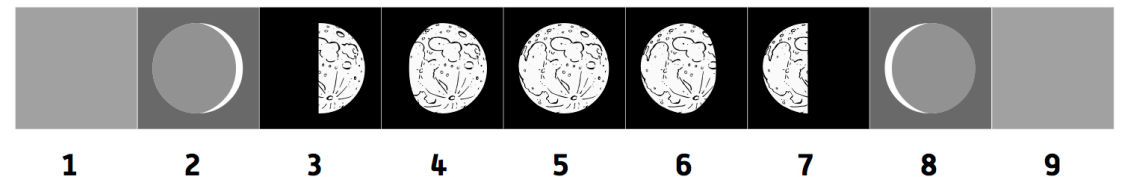
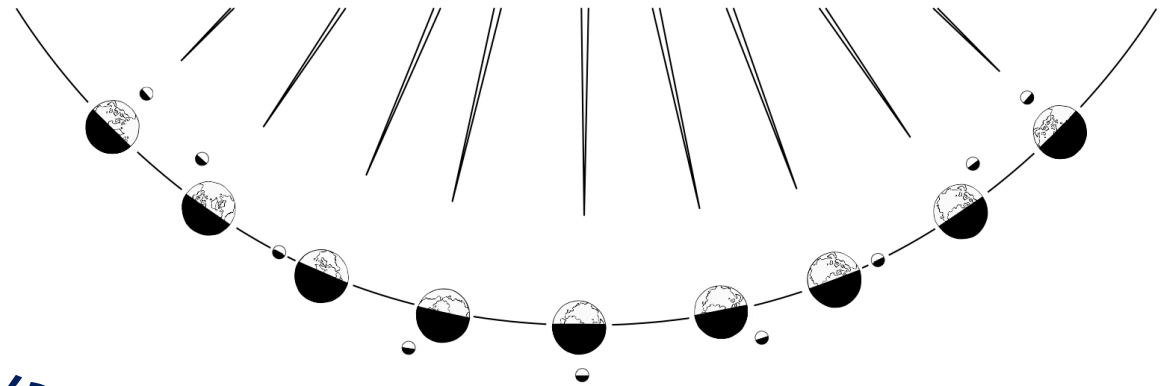
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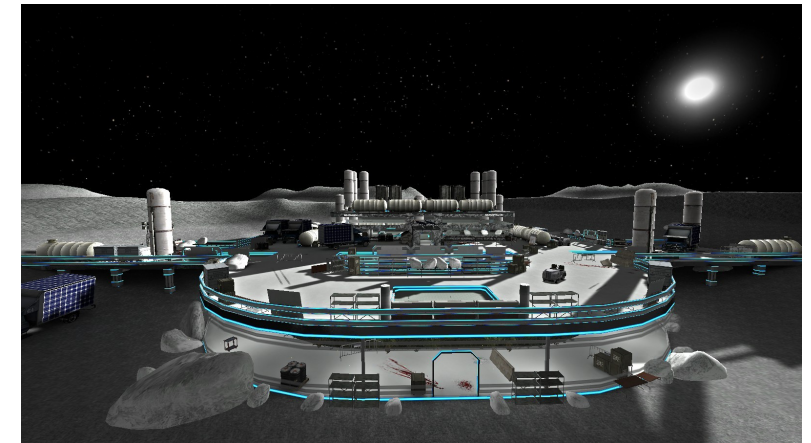


# waar dient het maanonderkomen voor?

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- Wonen
- Werken
- Onderzoek
- Vakantie
- ??





# Materialen voor jouw ontwerp

- Wat heb je nodig om een onderkomen te bouwen?
- Hoe kom je aan deze materialen?
- Zijn deze materialen ook op de maan?

# ter overdenking

Een kilo naar de ruimte sturen, kost zo'n € 20.000 per kilo

Hoe komen we aan voldoende voedsel en water?

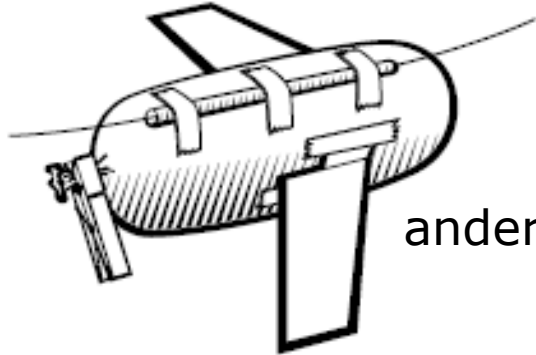
Wat doen we met mini-meteoor inslagen?



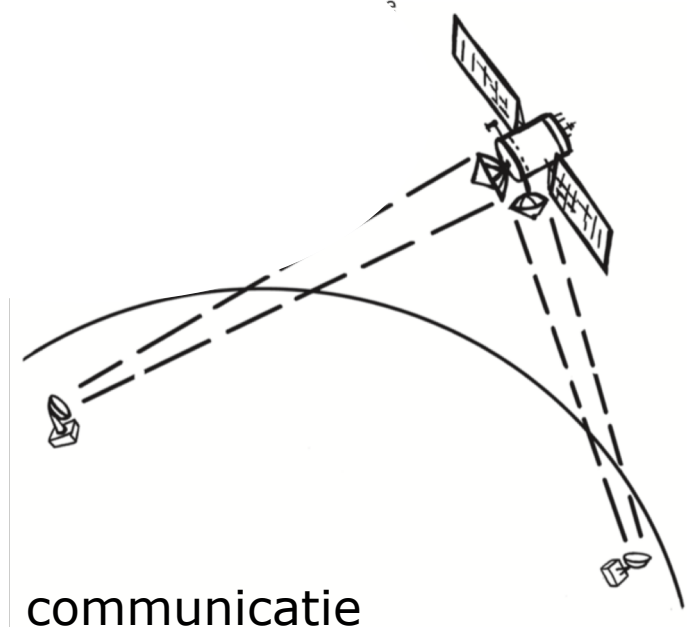
# hoe ziet jouw maanbasis eruit?



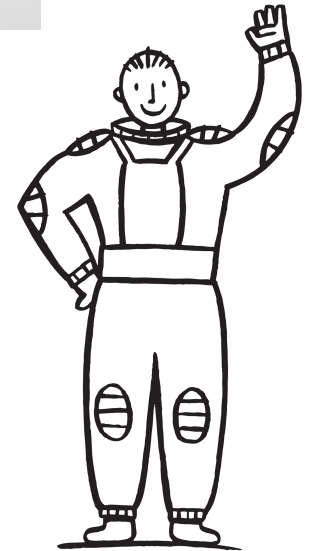




andere raketten



communicatie



astronautenpak