



## MISSION 2: A NEW DAY!

The creatures are now much healthier and the AstroZoo managers are challenging you to find a more sustainable, longer term solution for the creatures' oxygen and food supplies.

They are thinking about growing OxyTurf and FoodGrass on the plantable surfaces in each dome. Click on the buttons on the left for the information about **OxyTurf** and **FoodGrass**.

Your mission? To work out and report back to the AstroZoo managers on out how best to divide the land in your bio-dome between OxyTurf and FoodGrass to meet the creatures' needs every day.

The managers have already suggested four possible divisions of the plantable land for the different proportions of OxyTurf and Foodgrass that could be planted in the Dome. Choose an idea and Run the simulation to see how much O<sub>2</sub> remains and how much food energy is left after 24 hours.

Can you decide which of the ratios, A, B, C and D is better and why?  
Be prepared to report back.



### OXYTURF

- OxyTurf is a plant with a difference!
- Each square metre of OxyTurf produces a fixed amount of O<sub>2</sub> (in m<sup>3</sup>) every 24 hours
- OxyTurf grows well anywhere except rocky ground.
- O<sub>2</sub> is valuable and can be used in other areas of the AstroZoo.



### FOODGRASS

- Created by Earth's smartest scientists!
- FoodGrass tastes delicious but will not grow on rocky land
- Each square metre planted produces a fixed amount of food energy (in kJ) every day
- FoodGrass re-grows at the end of each day

