| Move number | Start position | End position | Description of move | Special action |
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| Move number | Energy used <br> Life Move Launch TOTAL |  |  |  | Energy producedSolar Waste TOTALHum Anim |  |  |  | Fuel reserves + or - | Fuel left $200 \text { max }$ | Special action |
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NAVIGATOR'S CHART

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CREW CODE

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This char $t$ is for use only with a scrolling space map. Mark the position of your spacecraft with a dot at the start and end of every turn and join up the dots with a straight arrow. Mark the position of any hazards and any other important features such as planets.

## NOTES FOR THE CAPTAIN

Your job is to get your spaceship safely to the planet Terra Nostra. Only four spaceships can land on Terra Nostra. You have food, fuel, air and water in store on the spaceship but if you run into danger you may lose some of your stores. You will be given a list of some of the dangers you may meet.

Before you start write down your name and your crew code on the Captain's Log.
Moving your spaceship
At every turn you may move your spaceship up to 3 squares over the space map. You can move forwards, backwards, or sideways. You cannot move directly on a diagonal but you can change direction during a move.

Except on the first turn (blast off) you do not have to move, i.e. you can stay in the same place. You are not allowed to jump over any spaceship.

When every captain has had a chance to move, the space map will roll on. Remember that this could put your ship into danger unless you are careful.

If you run into danger a hazard card or message will be received. This may affect your stores or your ability to move the spaceship.

## At every turn

1. Look at the space map. Write down the the grid reference (letter and number) of the square on which your spaceship is waiting (2nd column)
2. Check to see if your spaceship has run into danger. Make sure your crew are aware of any hazard messages and action they need to take.
3. Move your spaceship up to 3 squares, unless told otherwise. Write down how you have moved e.g. 2f, 1R means 2 squares forward +1 square right, 1b, 1L means 1 square back +1 square left. (4th column)
4. Write down the letter and number of the suare you end up on. (3rd column).
5. Check to see if your spaceship has run into danger.
6. Note down, in the last column, anything special that happened during this turn, e.g. blast off, hazard, change in number of crew or problem with resources.

Ask for help at any time if you are not sure what to do.

## NOTES FOR THE ENGINEER

Your job is to look after the energy requirements and power supply during the voyage and to keep a record of fuel reserves. You should aim to keep some fuel in reserve for landing on Terra Nostra. You may have to cope with emergencies.

You have 200 units of fuel at the start. You cannot store more than this. You will use fuel for moving the spaceship and maintaining life support systems. You will be able to generate energy from solar power and animal waste.

## At each turn

1. Look at the space map and check with the Captain for any special instructions, especially if the ship meets a hazard.
2. In your log, write down the energy used:

2 units every turn for life support systems
1 unit for each square moved during the turn (does not apply in time-space warp)
5 units for blast off from any planet, including Earth.
3. In your log write down the energy produced

1 unit every turn for human waste
1 unit every turn for animal waste if 5 animals or less on board
2 units every turn from animal waste if more than 5 animals on board
2 units per turn of solar energy ONLY if spaceship is in a solar region.
4. Write down the number of units of fuel to be taken from or added to fuel reserve.

If energy used during a turn is greater than energy produced the difference will have to be taken from the fuel reserve. If energy produced is greater than the energy used, the excess can be added to fuel reserve BUT you cannot have more than 200 units in reserve.
5. Write down the number of units of fuel left in reserve at the end of the turn.
6. Report to the Captain if the fuel reserve falls below 50 units.

At the end of each turn the whole space map will roll on a number of squares. You do not require fuel for this movement.

If there is change in number of crew members or the number of animals at any time, remember to note this down in your log as this may affect your fuel reserves.

## NOTES FOR THE CATERING OFFICER

Your job is to look after all the food supplies during the voyage and to keep a record of food stocks. You must try to keep some food for when you land on the planet Terra Nostra. You may have to cope with emergencies.

You have 500 units of food at the start. You cannot store more than this. You will use food for the crew and for any live animals. You will get fresh food from plants and from live animals (e.g. milk, eggs). Animals may be slaughtered for meat.

At the start note down how many crew members and how many live animals (no more than 10) on your spaceship.

At each turn

1. Look at the space map and check with the Captain for any special instructions, especially if the ship meets a hazard.
2. In your log, write down the food used:

1 unit per turnfor each crew member
3 units per turn for each live animal
3. In your log, write down the food produced.

4 units per turn from plants ONLY IF in a solar region, or
2 units per turn from plants at any other time
1 unit per turn from each live animal
$\mathrm{T} / 4$ units for this turn AND the next turn for each animal you slaughter at this turn.
( $\mathrm{T}=$ the number of the turn; divide this by 4 and round up to next whole number if necessary). You must tell the Captain if you intend to kill an animal
4. In your log write down how many units of food are to be taken from or added to the store. If you use more food than you produce, the difference must be taken from your food store. If you produce more food than you use, the excess can be added to your food store but remember you cannot store more than 500 units.
5. Write down the number of units left in your food store.
6. Tell the Captain if your food store falls below 100 units.

If there is a change in the number of crew members or the number of animals at any time, remember to note this down in your log.

## NOTES FOR THE ENVIRONMENT OFFICER

Your job is to monitor the air and water reserves on the spaceship. You should aim to keep some in reserve for the landing on Terra Nostra. You may have to cope with some emergencies.

With all life support systems working normally, all the used water can be recycled and the proportion of oxygen in the air can be maintained by photosynthesis in plants. You have 100 units of water and 100 units of oxygen in reserve in case of emergency. You cannot store more than this amount of oxygen and water.

At each turn

1. Look at the space map and check with the Captain for any special instructions, especially if your ship meets a hazard.
2. If no special action is needed in the event of an emergency, write down the number of oxygen and water units left in reserve. (This will stay unchanged from the end of the previous turn).
3. If special action has to be taken in an emergency, write down in your log how much oxygen must be taken from reserve:

1 unit per turn for each crew member
1 unit per turn for each live animal (unless instructed otherwise by a hazard card). This will also be how much you have in store at the start of the next turn.
4. If special action has to be taken in an emergency, write down in your log how much water must be taken from reserve:

1 unit per turn for each crew member
1 unit per turn for each live animal (unless instructed otherwise by a hazard card). This will also be how much you have in store at the start of the next turn.
5. Tell the Captain if either the reserve of oxygen or of water falls below 50 units.

At the end of each turn the space map will roll on a number of square. Watch carefully to see if your spaceship runs into trouble.

If there is a change in the number of crew or number of animals at any time remember to note this in your log.

