MISSION GUIDE BOOK

FOR THE ESTABLISHMENT OF

MARS

VERSION 1.0

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INTRODUCTION

Welcome to the mission guide book for the establishment of Mars. This book contains everything you need to complete the missions that have been assigned for you to complete during your stay on the Red planet.

You will use our modified lunar lander to touch down on the surface and complete various objectives in the surrounding area. The different landing areas you will be going to each have devices, bases and structures that require calibrating, fixing and maintaining. These landmarks are illustrated on the maps (included at the end of this book).

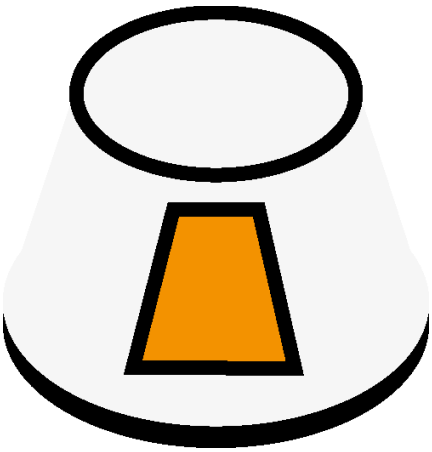
Once all objectives have been completed for any given mission, you then need to make your way back to the lander to take you back into orbit.

Once all of the objectives have been complete, you then need to make your way to the rocket and fuel it before taking off into orbit.

And this super thin book is all you have to complete these objectives. This 'department' is a joke...

BASES

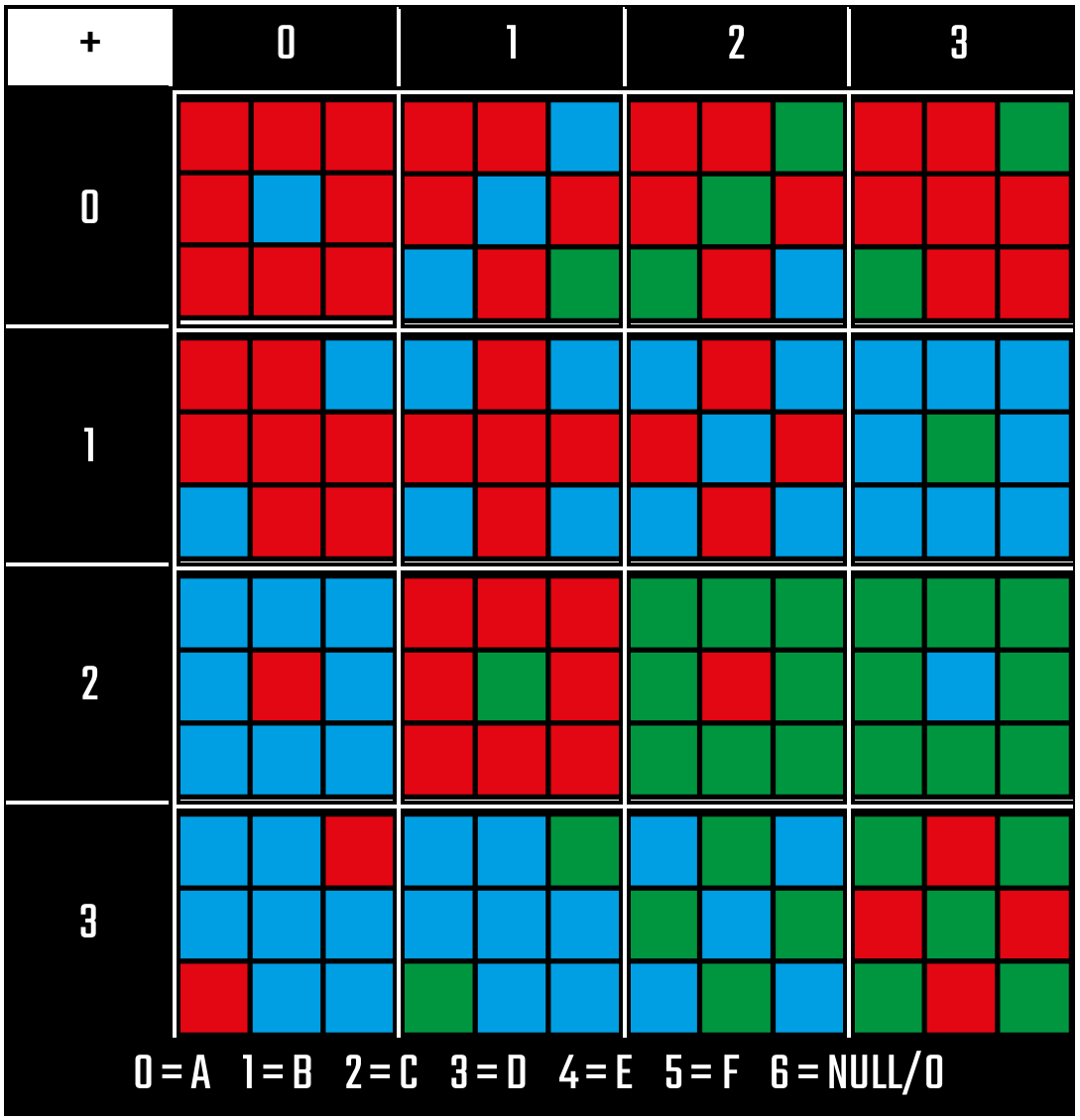
Bases provide a safe haven for astronauts on their missions to Mars. They will provide you with oxygen (your suit will refill its own oxygen automatically whilst inside the base). Part of your mission is to make sure everything is functioning correctly. Bases can come in various configurations (as shown on the maps), and objectives will change depending on the type of bases present in any given landing zone.



Every base has an o2 capacity! (the amount of o2 that refills your suit)

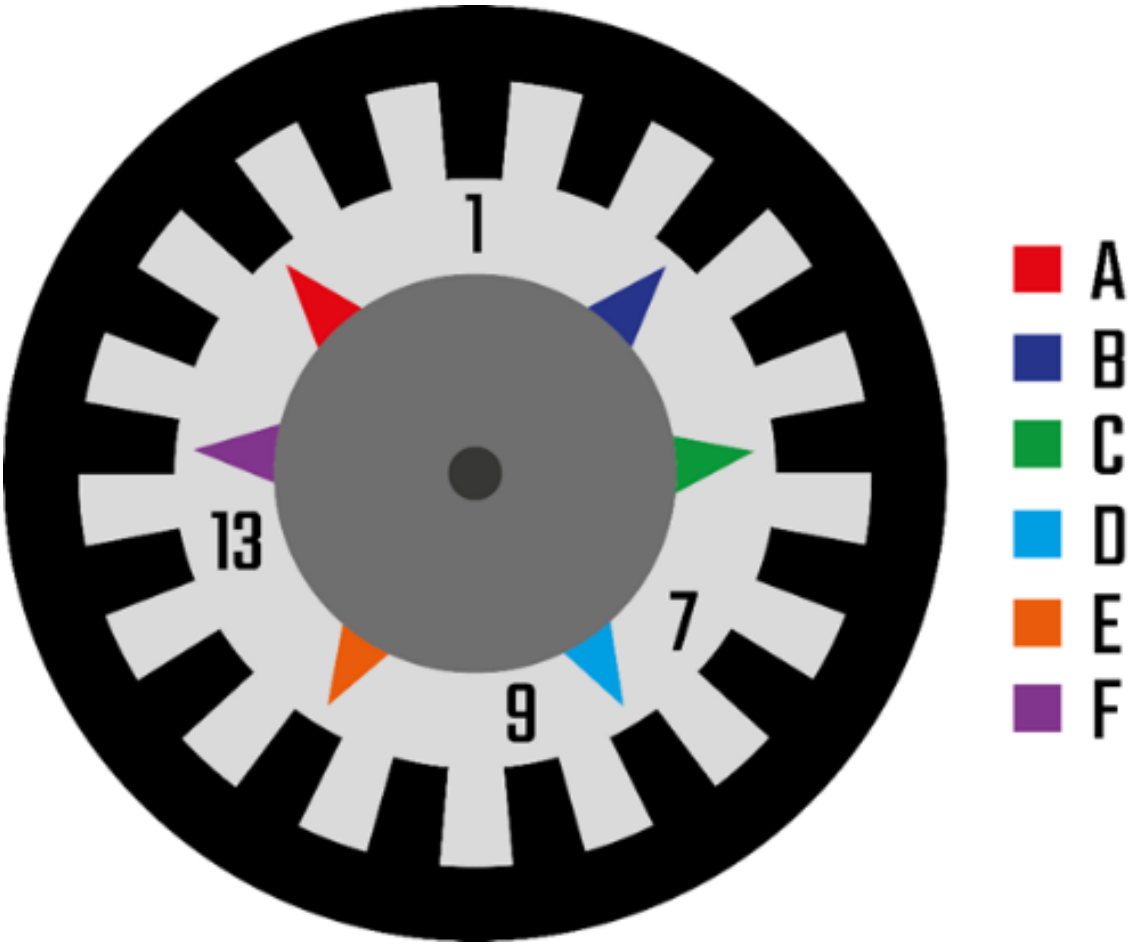
OXYGEN

Depending on the calibration image, add the row to the column. Then convert this to the corresponding letter and interpret the value on the dial (next page).



Look on the left hand side of the base, next to the piston

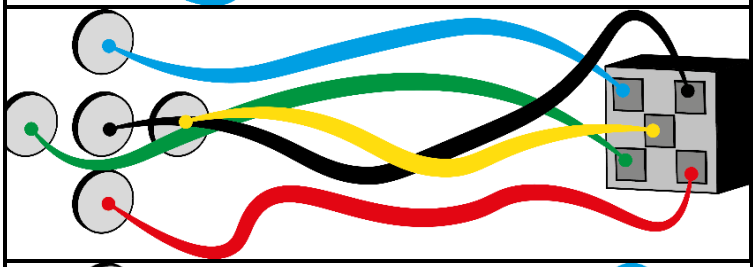
OXYGEN



Input inside the base.. straight ahead as you go in.

ELECTRONICS

Depending on the electrical system, tap the circles and square buttons to correctly calibrate the base, enabling the use of electricity.

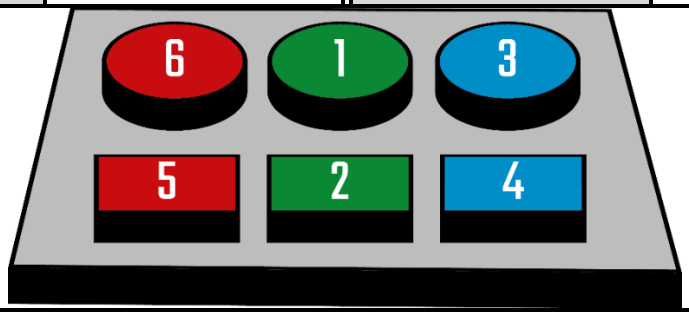
ELECTRIC SYSTEM	COMBINATION
+	
-	
-+	
+-	

Just left of the base door...
once this is done, you can then enter the base!

OPERATING SYSTEM

Depending on the diagnostic seen on screen, input the correct command as per below.

DIAGNOSTIC	COMMAND	DIAGNOSTIC	COMMAND
76KBX64	3564524342	HJTH445H	432566213
H54J5	34532662	5H45H5U	4422116
G54JGH	4311425	YFDGE23	6123
H5HEER	1556225552	HTHR767	2341235
HJ54RE	434343215	75KBX64	2311
J664EYH	533225112	HTHR768	11566345
T446422	23241	J66554EYH	11634
47YYJ5T3	2424124156	YYW3YHR	3456
HEGF4H5	5551264515	HTRH35	3455
JJKW55	66114	JYTH46	335411



Must be working before certain base functions can be used.

WATER

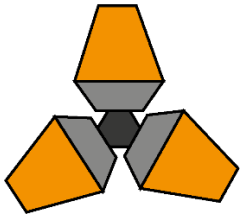
Right hand side of the base.

Depending on the flashing lights, enter the code.

1	AAAA
2	ABAB
3	ACDD
4	ADDB
5	ABBA
6	BCDD
7	CCCB
8	CBBD
9	DAAB
10	BBCD

A	B	C	D

RESEARCH



Find the research bot, and input the number (depending on the variables it gives you as per below), into the computer at the appropriate base. Please input the name of our different research bots in the table below.

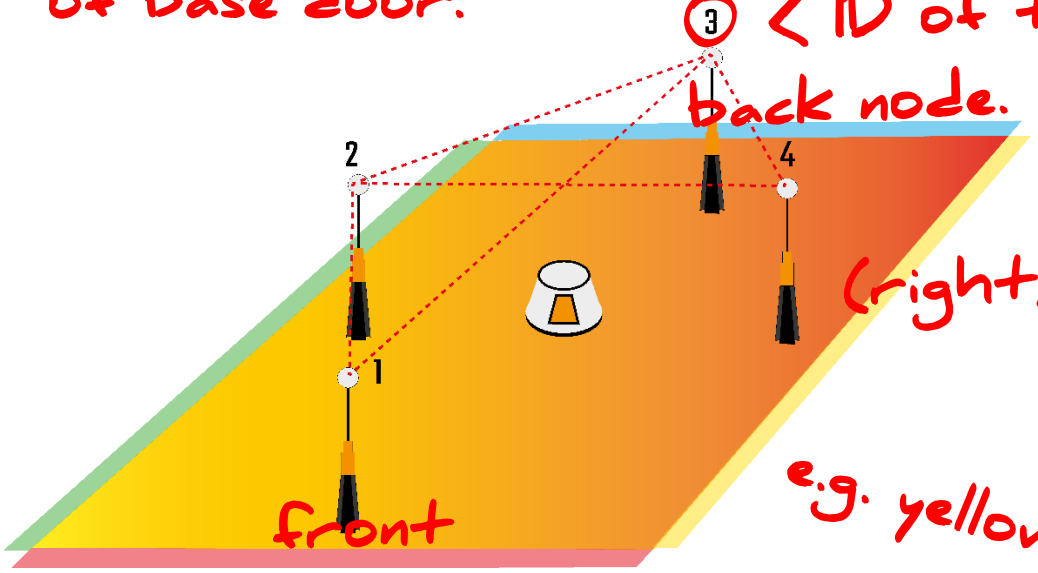
AA	4	AO	5	IE	1
UA	5	EA	2	IO	2
IU	1	UU	3	EU	4
EO	2	EI	1	EE	5
AI	3	UO	4	II	3

NAME	ADD TO TOTAL	NAME	ADD TO TOTAL
Dave	5	Ed	7
Edgar	2	Beethoven	6
Shaun	8	Mary	3
Elizabeth	1	Barry	1
Timothy	4	Jon	0

NODE

Follow the simple instructions below to change the colour of the nodes. Observe the priority.

once complete, press button right side of base door.



3 < ID of the back node.

LOW PRIORITY: BORDER COLOURS < start			
MEDIUM PRIORITY: ATENNA TYPE			
A	B	C	D
NO CHANGE	IF NODE 4, RED	IF 3, GREEN	GREEN
HIGH PRIORITY: LINK			

1. IF 1-2 OR 2-1, BOTH BLUE Connection from 1 to 2 or 2 to 1
2. IF 2-4 OR 4-2, 2 BLUE
3. IF 2-3 OR 3-2, 2 RED
4. IF 3-4 OR 4-3, BOTH GREEN
5. IF 1-3 OR 3-1, 1 YELLOW

Number on the node is what it links to.

TUBE GREENHOUSE

Depending on the rack status, press the appropriate coloured button. For the rest of the buttons, press the right button depending on the plant (next page).

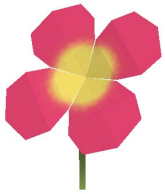
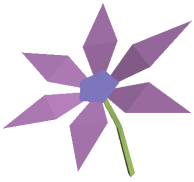
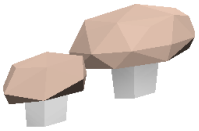
IMP	RACK STATUS	COMMAND
1(!)	MULTIPLE OF 5	SECOND IS RED
5	NUMBER IS 18	SECOND IS RED
4	NUMBER IS 4	FIRST IS BLUE
8	NUMBER IS 10	FIRST IS RED
3	NUMBER IS 15	FOURTH IS BLUE
9	MULTIPLE OF 2	FIRST AND FOURTH IS RED
6	NUMBER IS 2	THIRD AND FOURTH IS RED
2	NUMBER IS 7	FIRST AND THIRD IS GREEN
7	NUMBER IS 17	SECOND IS BLUE

1 = takes priority

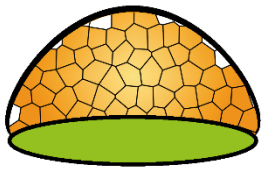
1	2
3	4

Tubes require the water supply to be functioning properly!

TUBE GREENHOUSE 2

FLORA	PRESS	FLORA	PRESS
			
			
			

DOME GREENHOUSE



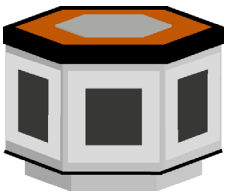
Maintain the plants that are growing inside the greenhouse. You will need to manage their h20 and minerals. For best results, use the below values:

< Base stats

PLANT	H20	MIN		COMMENTS
HYPANIS	4			IF GREEN FRUIT, +1 TO H20
OXIA PLANUM	7			IF PURPLE FLOWERS, -2 TO H20
GALE	2			IF SOIL RED, LAST 1 MIN TO BLUE
MAWRTH	1			IF BROKEN BRANCH, FIRST MIN RED
EBERSWALDE	4			IF LEAVES BROWN, +4 H20

GREENHOUSE LAYOUT		
GALE	HYPANIS	OXIA PLANUM
OXIA PLANUM	EBERSWALDE	GALE
MAWRTH	MAWRTH	EBERSWALDE
HYPANIS	OXIA PLANUM	HYPANIS

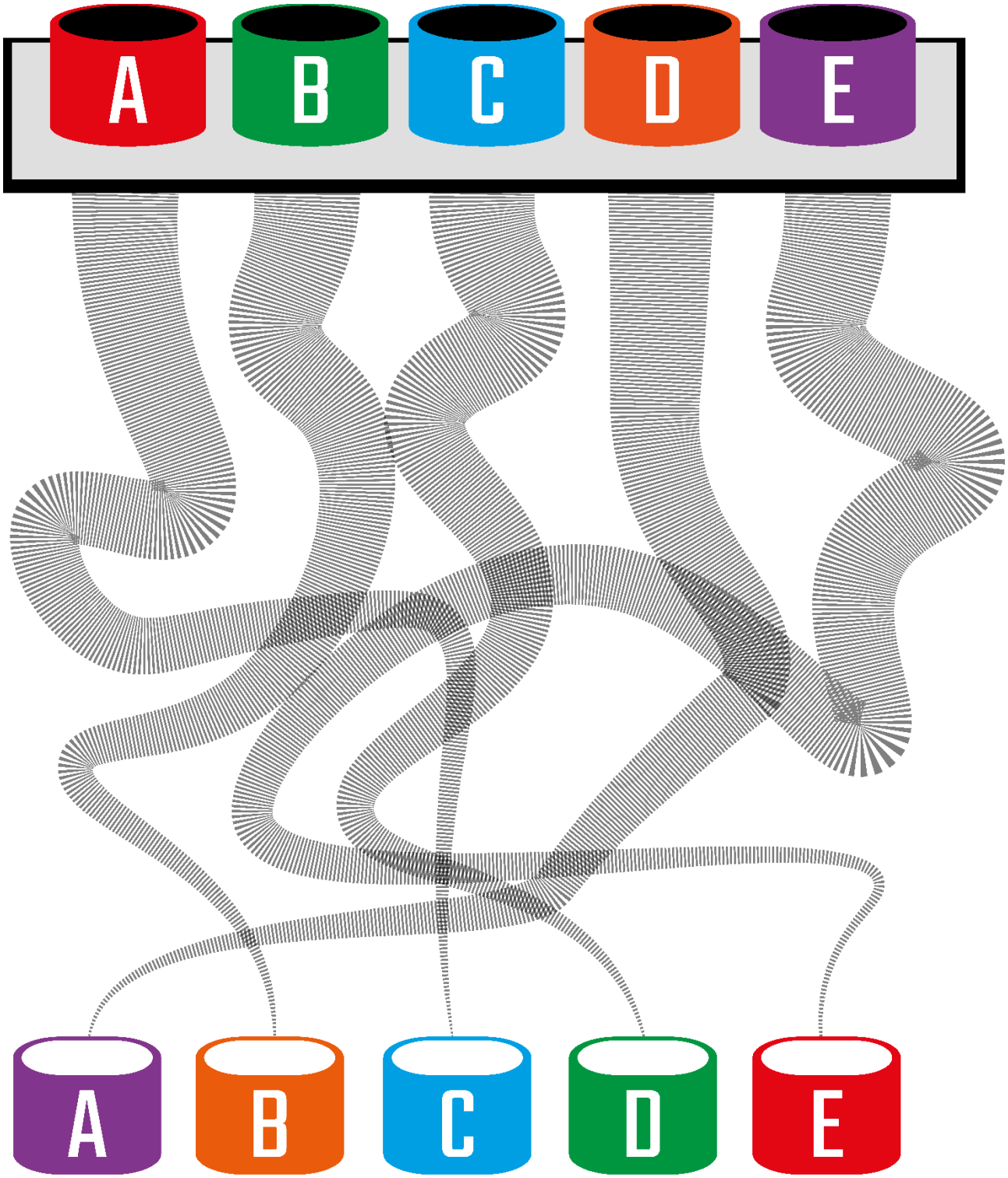
SUPPLY



Put the supply in the correct location. The graphic on the following page shows the storage system.

SUPPLY	STORAGE
TOMATOES	MUST BE PUT IN THE RED BOX
RICE	MUST END UP IN THE C BOX
SABZI	MUST END UP IN THE GREEN BOX
CHICKEN	MUST END UP IN THE E BOX
AUBERGINE	MUST END UP IN THE PURPLE BOX
POTATOES	MUST BE PUT IN THE C BOX
SOUP	MUST END UP IN THE D BOX
TOILET PAPER	MUST BE PUT IN THE E BOX
DEODERANT	MUST END UP IN THE B BOX
SOAP	MUST END UP IN THE D BOX
AA BATTERIES	MUST END UP IN THE E BOX
TOOTHPASTE	MUST BE PUT IN THE ORANGE BOX

SUPPLY



Supplies start to perish

Soon after landing!

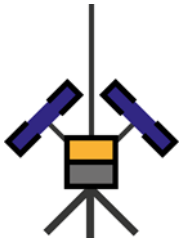
LANDSCAPE

There are many different hardware systems on the surface of Mars that we have installed over the years. Occasionally, you will need to venture outside of your base and fix, recalibrate and find various objects included in the following sections.

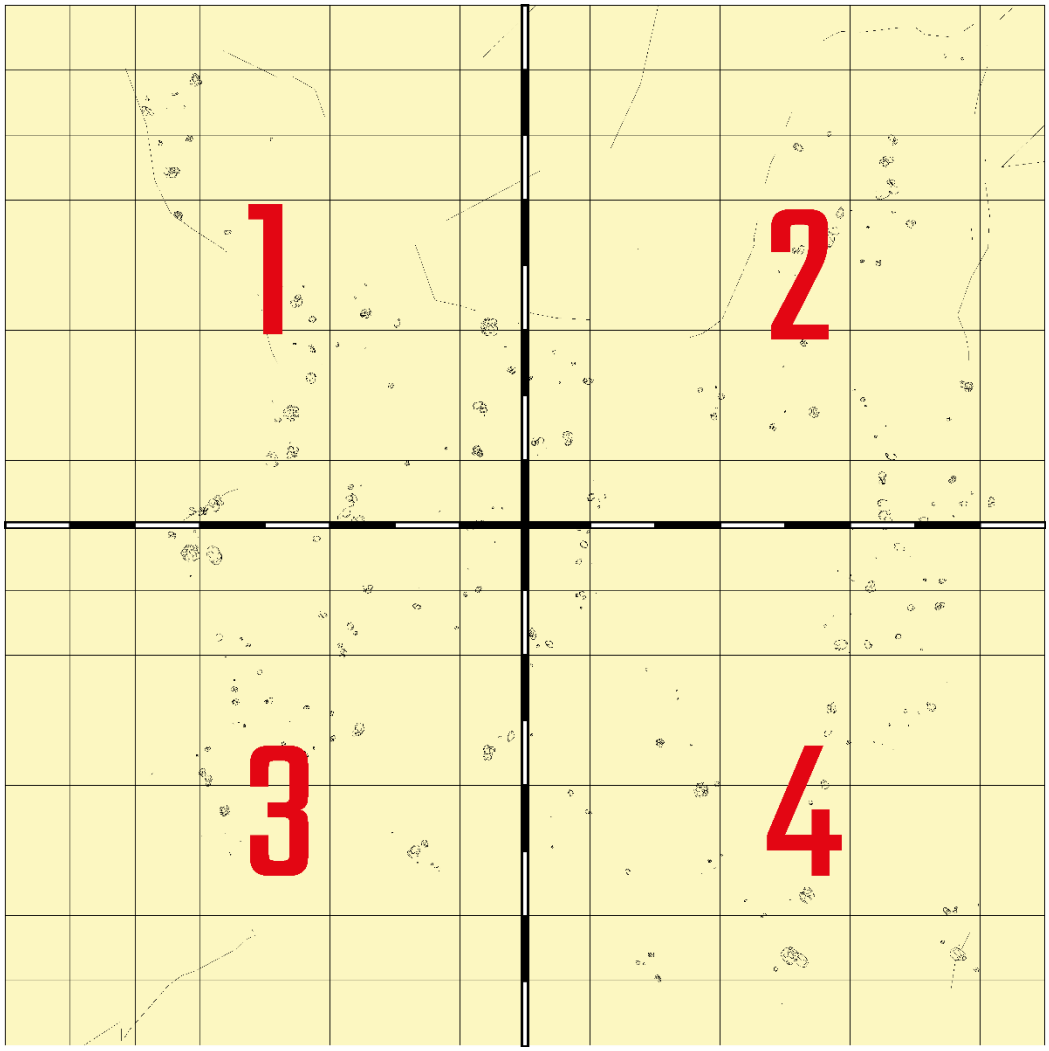
Remember to keep an eye on your oxygen levels are at all times whilst you are out on the landscape!

Might be worth planning the journey ahead of time...

DTN

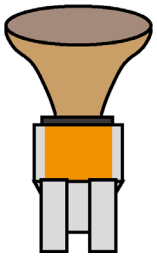


Each DTN node has an ID associated with its location on the map. Depending on the location, change the DTN nodes' ID as per the map below.



Unless otherwise stated on the map!!

TERRAFORM



Depending on the altitude and type of the chamber, input the correct number.

You can find an altimeter in a nearby base.

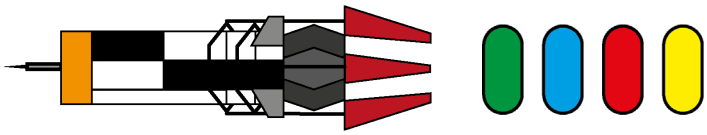
Pick it up after OS on.

(Altitude now shown in suit UI)

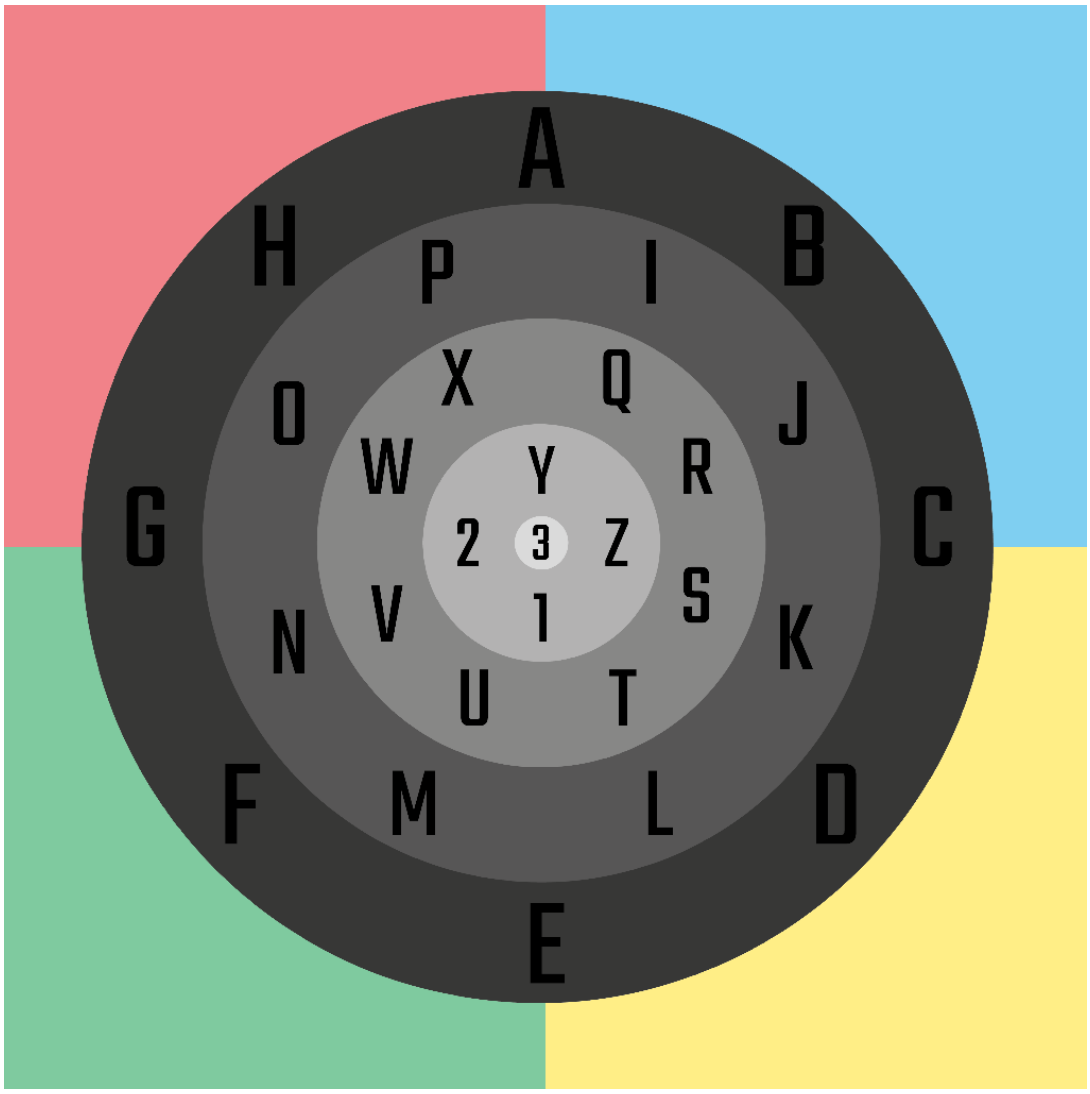
ALTITUDE											
< -60			>-60 <-50			>-50 <-40			>-40 <-30		
5	1	0	4	8	0	8	7	9	3	5	7
>-30 <-20			>-20 <-10			>-10 <0			>0 <10		
8	4	5	7	0	5	5	8	8	3	6	0
>10 <20			>20 <30			>30 <40			>40		
0	4	9	7	0	0	5	9	0	3	8	1
TYPE											
A			B			C			D		
+1	+3	+2	+2	+1	+3	+3	+2	+1	+3	+1	+2

Look on the side of the emitter >

DRILLS



Depending on the calibration of drill, throw in the appropriate oil(s).



e.g. H= red

G= red and green

A = red and blue

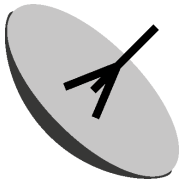
ROVERS

Depending on the rover, update the rover using the appropriately coloured Mars Serial Bus (MSB) and refactored code (the MSB and terminal to change the code on it can be found in specific bases).

NAME	CODE	MSB COLOUR
BODY	A 1 E 5 C	
HERMIT	C 3 B 2 A	
CONVENIENCE	4 4 D E D	
ORDINARILY	B 5 D B B	
CESSATION	3 A 2 C 5	
ROSALIND	E D 1 A 2	

Takes time for the code to Upload onto the rover!

RADIO TELESCOPE



Depending on the letters on the spinning disc and the display on the side of dish, input the correct number.

e.g. if the white text is 2, A is one.

SPINNING DISC

		A	B	C	D		A	B	C	D		A	B	C	D		A	B	C	D
W	1	3				2	1				3	2				4	4			
B	2		1			1		3			4		4			3		2		
R	3			4		4			2		1			1		2			3	
G	4				2	3				4	2				3	1				1

SIDE DISPLAY

CODE	CHANGE INPUT	CODE	CHANGE INPUT
123	+1 TO D	231	+1 TO D, +2 TO C
213	+2 TO D	321	+2 TO A, +1 TO C
312	+1 TO B	132	+1 TO D, +1 TO A

Right hand side...^

WATER PUMPS

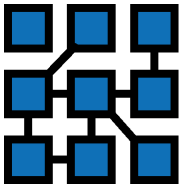
Throw the tablet into the body of water the pump is near. Depending on the colour of the bubbles emitting from the tablet, input the correct value.

ACIDIC							N	ALKALINE						
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14

PH LVL	INPUT	PH LVL	INPUT	PH LVL	INPUT	PH LVL	INPUT
0-3	5	4-8	-1	9-11	1	12-14	-5

only two chances to get this right!

SOLAR ARRAY



Easy...

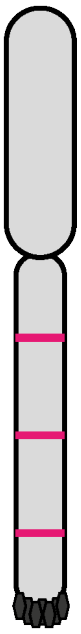
In order to power larger bases, a solar array is required. This particular array is in an early experimental phase and some issues have arisen that require fixing.

SOLAR PANEL INPUTS									
LINE	1	A	B	B	A	C	A	A	B	C
	2	C	C	A	B	C	B	A	B	A
	3	C	A	C	B	B	B	A	C	B

CONDITION FOR ANY GIVEN SOLAR PANEL	INPUT
TOP PRIORITY	
IF LINE 1, IS 'C', AND IS CONNECTED TO AN 'A'	
IF LINE 1, IS 'A', AND IS CONNECTED TO AN 'B'	
IF LINE 2, IS 'B', AND IS CONNECTED TO AN 'B'	
IF LINE 2, IS 'A', AND IS CONNECTED TO AN 'C'	
IF LINE 3, IS 'C', AND IS CONNECTED TO AN 'B'	
IF LINE 3, IS 'B', AND IS CONNECTED TO AN 'C'	

PIGEON HEAVY

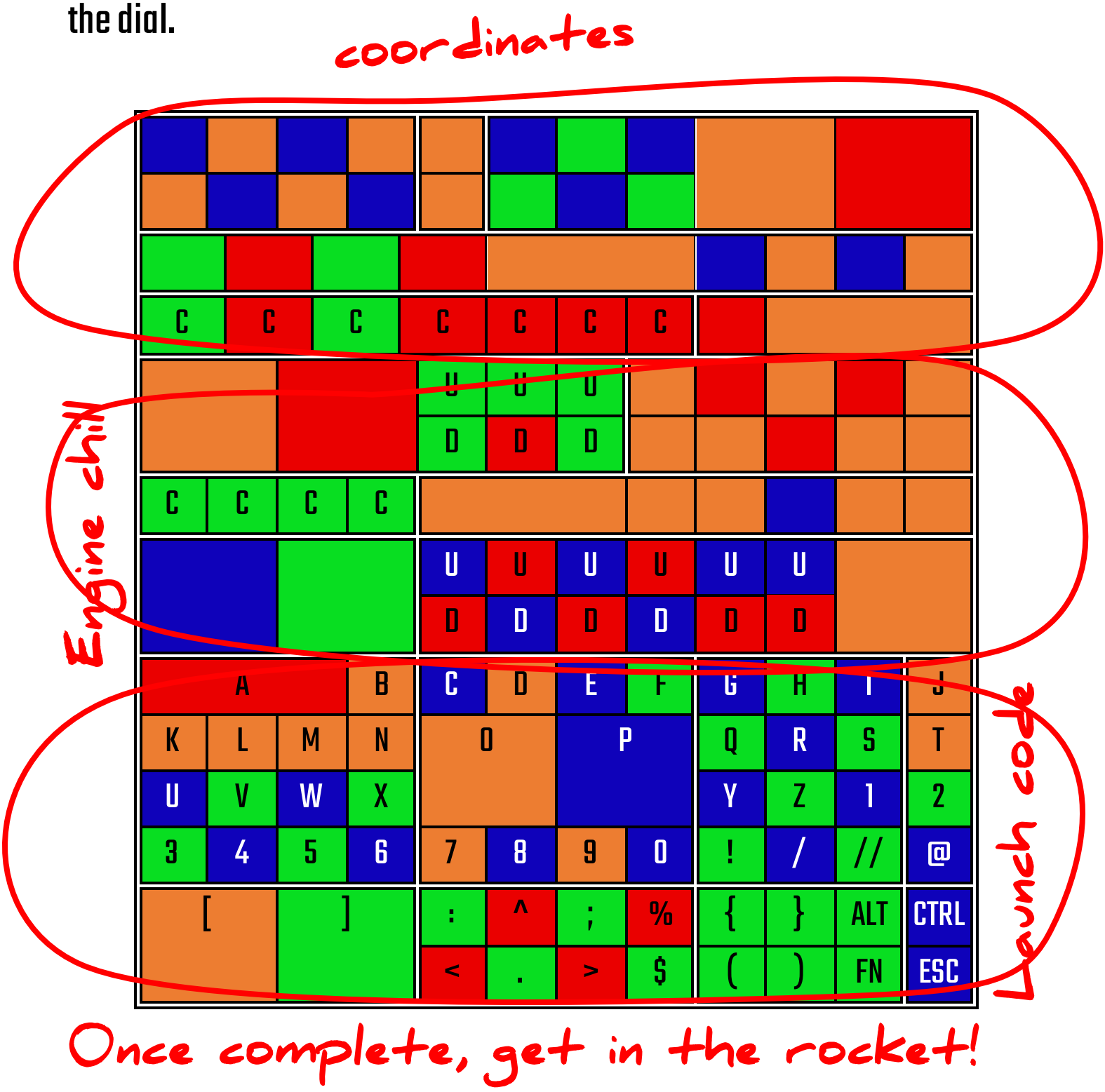
A SHORT GUIDE ON HOW TO LAUNCH SUCCESSFULLY



Know which buttons to press before getting to the rocket!

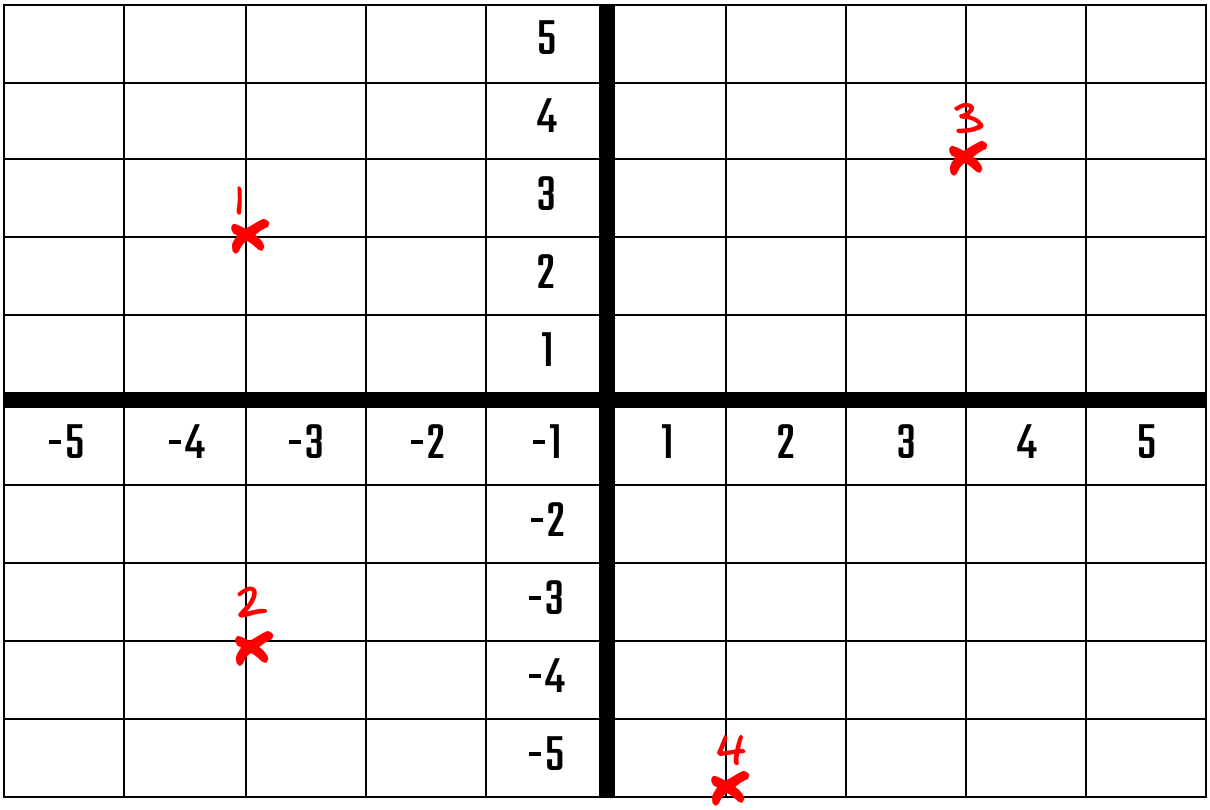
ROCKET DISPLAY

Depending on the calibration image, add the row to the column. Then convert this to the corresponding letter and interpret the value needed on the dial.

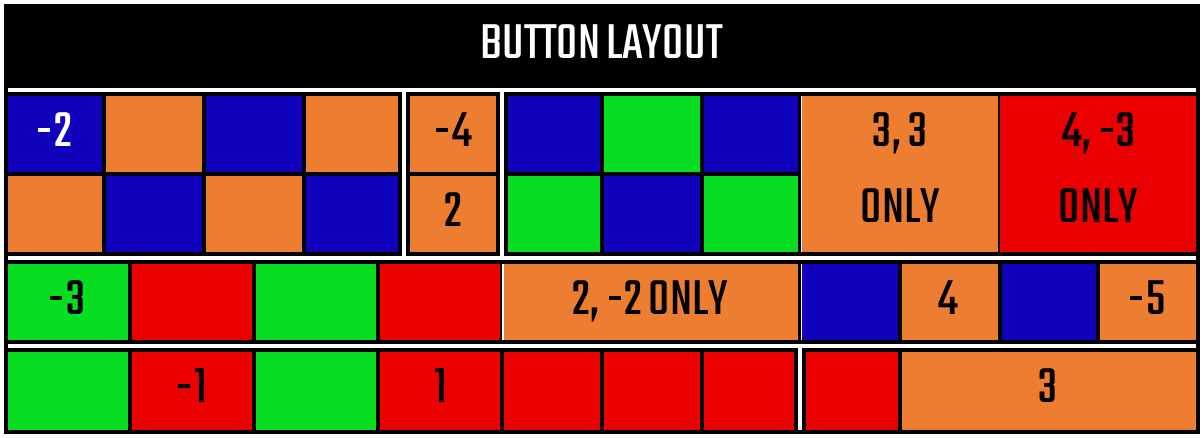


COORDINATES

Before lift-off, the coordinates of the rocket need to be recalibrated. You need to input the coordinates sequentially, starting with the x axis, then the y axis.

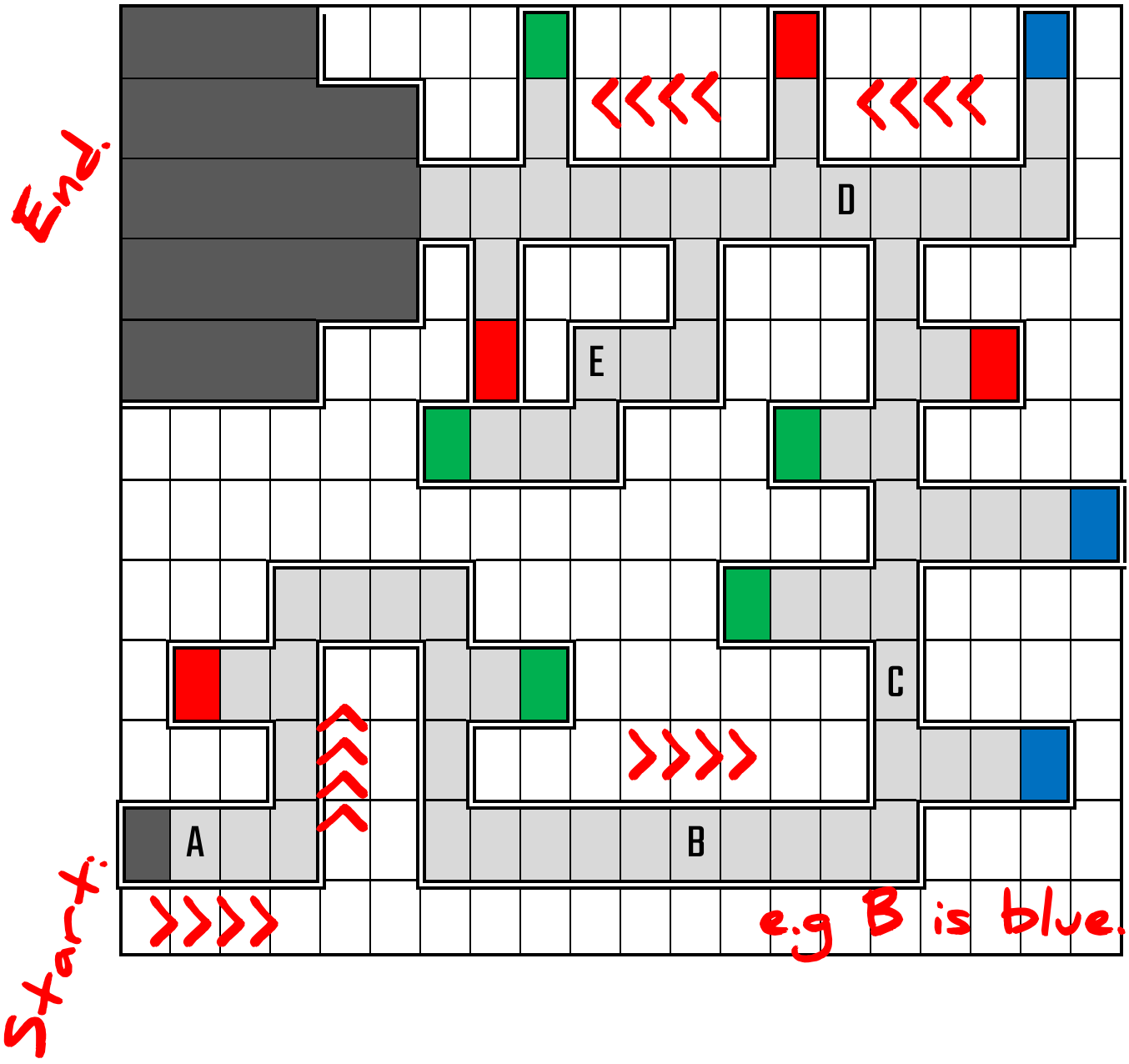


Start at 1, which is -3, 2



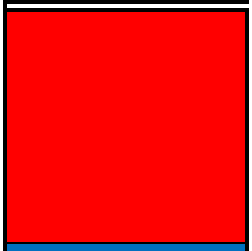
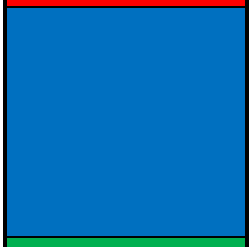
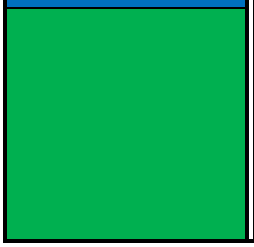
ENGINE CHILL

Chill the engine depending on its status (denoted by a single letter). The below graphic shows how the liquid nitrogen flows through the system. A letter will flow into its nearest colour, which is what will need to be inputted into the terminal.



ENGINE CHILL 2

Please enter the present button combination below.

INPUT COLOUR	CONTROLS
	third green circle
	Unique down
	second blue up

LAUNCH CODE

The rocket requires a launch code before it will lift off. For security, you have been sent this code in another message. If you would like to include it here, you can do so by writing it in the box provided below.

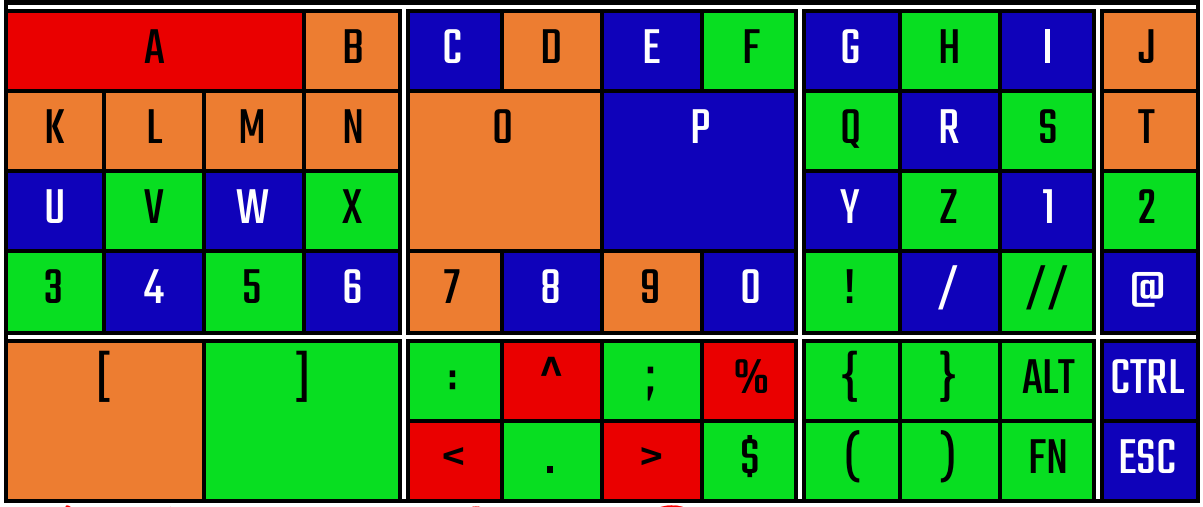
CODE

Press ESC twice, then enter the following code, with no spaces and all caps:

```
{
  SetDestination(Earth)
  Enginefire
}
```

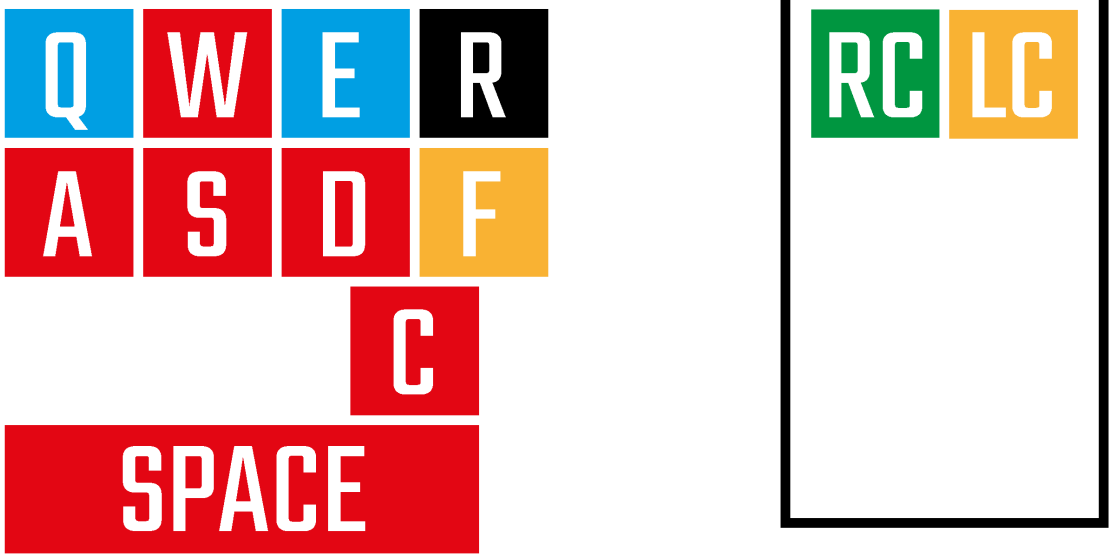
/=Enginefire

BUTTON LAYOUT



A=Earth 9=SetDestination

CONTROLS



[MOVE, CROUCH AND JUMP]

[OPEN GUIDE BOOK]

[INTERACT]

[FLASHLIGHT, ZOOM]

[PREV/NEXT PAGE] (WHEN 'ALWAYS DISPLAY' IS ON)

MISSION BRIEF 1: SMALL STEPS

If you're reading this, congratulations! You survived the 9-month journey from Earth. Welcome to Mars!

During your time here on the Red Planet, you have the challenge of maintaining our interests; fixing bases, looking after plants, recalibrating various technologies etc.

Accompanying you on your journey is this Mars Guide, which you can access at any time. (by pressing R, tab or esc on the keyboard)

For this mission, you need a fix the operating systems for both bases in the landing zone, as the flash memory has been corrupted. Once you have inputted the correct values, press enter and the red light above the screen should turn green (indicating it is fixed).

Make sure to read the guide whilst you are safely inside a base.

We will send the next mission brief with landing zone intel as soon as you are back on the station.

Good luck! :)

MISSION BRIEF 2: A LITTLE RESEARCH

For this mission, you need to hurry yourself to Base A and fix the electronics. You can't get inside unless this is done first, and this is the only source of oxygen in the area!

Once you've done this, relax for a few minutes in the base and get to grips with your next objective. (press R, tab or esc for guide)

You will need to find the research bot that is located in close proximity to the base. Interpret its readings and convert this to the number you need, and input this into the computer at the base (next to the door). Once inputted correctly, the light will turn green.

You can then return to the lander at this point, and blast off into orbit.

PS, remember to use your light when it gets dark, so you can see.

(press F)

MISSION BRIEF 3: THIS IS NOT A DRILL

This landing zone includes our flagship drills, made from old Saturn V rockets. These particular drills are switched off, so you will need to activate them once you have applied the appropriate oil to the drill bit. Find the oil that you need and throw it into the hole, then press the green button!

Don't fall in the hole!

As soon as you land, go straight to the base and read the drill part of this guide to see what you have to do in more detail.

Good luck!

Keep the guide up on the side by Pressing the 'always on' button.

MISSION BRIEF 4: MOUNTAINSIDE RETREAT

Our mountainside site includes 2 bases, a drill and a research bot. You've dealt with each of these before so this should not be a problem!

Get to Base A upon landing, fix the oxygen and prepare to complete the remaining tasks. It might be worth travelling to Base B before dark, so you can find it easier, but that is up to you.

Remember to use your light if you need to!

(press F)

MISSION BRIEF 5: ROVER REPAIR

This landing site includes two bases, and currently has two rovers circling around them. These rovers require updating, but due to unforeseen circumstances (budget), this cannot be done from Earth and must be done manually.

When you land, the first objective should be to get the name of the one of the rovers (this will be important later).

In Base A, there is an MSB stick. Pick it up and plug it into the nearby machine. You then need to put some data on it (depending on the name of the rover, see the rover page of this guide). Once the data is on the stick, eject it and go to the appropriate rover and insert the stick. The data will then upload and if successful, will change the red light to green. The data takes approximately 20 seconds to upload, so keep this in mind!

Repeat this for the second rover, and your mission will be complete.

Make sure you plug it into the right coloured slot.

MISSION BRIEF 6: TUBE OF LIFE

For this mission, you will need to manage and configure one of our tube greenhouse bases (B). But first, you will need to complete objectives at A.

You are already familiar with the research objective, so complete that one first. Then you will need to configure the nodes surrounding the base (see the node page).

Once this is done, make your way to B and press the appropriate buttons depending on the plants present and diagnostics given on the terminals above the racks (see the tube greenhouse page).

Remember to fix the water at that base too, otherwise the plants will die.

The rack status takes priority over the default plant inputs.

MISSION BRIEF 7: THE CRATER

In an attempt to make Mars hospitable, we have installed a number of terraforming machinery around the planet. Such systems are present in this landing zone, and you will need to configure them.

As soon as you land, get to base A and fix the operating system. After this, you can safely pick up the altimeter that is to the right of the operating system terminal. This will enable you to know your current altitude, which will help you when configuring the terraforming machines.

Keep an eye on your oxygen, going first to a base and then going to the nearby emitters.

Stand in front of the terminals by the emitters for a decent altitude reading.

MISSION BRIEF 8: A BIT CHILLY

This landing site is located at the north pole of the planet. There is quite a lot to do, so make sure you go straight to Base A upon landing, and plan your journey. It is suggested that you start at A, complete the nearby objectives, move to B to do the same, and finish up at C before going back to the lander.

This site includes radio telescopes that all require calibration. Their systems can be quite complicated, so make sure you have read the appropriate page in this guide before travelling to them.

Read the map. Some of the DTN nodes have an ID different to that shown in the guide.

MISSION BRIEF 9: UNDERGROUND SURVIVAL

This landing site is a little different, with all of our bases and apparatus being located underground inside a cave. You will need to enter the cave (make sure to turn on your flashlight!) and linearly complete the puzzles.

It makes sense to travel to the bases in letter order and complete their nearby objectives, but we will leave the logistics up to you.

The bases don't have too much oxygen capacity, so you will have to travel fast!

….. this seems difficult!

Must mentally prepare.

MISSION BRIEF 10: FARMING ON MARS

During this mission, you will need to check up on the flora that is inside the big greenhouse and make sure everything is how it should be. You will also need to fix the solar array that is used to power the greenhouse, as well as some smaller duties that you are already familiar with.

MISSION BRIEF 11: DELIVERY

This mission is quite complex with many smaller tasks requiring completion, with the addition of collecting several packages we sent over, and storing them in the correct place (inside the center base). We have staggered the drop times for each of the packages and will send details in a further message.

^on the map now.

Be careful, these packages perish over time and must be collected promptly.

P.S. We have included some personal image files on this transmission of your family that they wished to send to you, just in case you fail to recognise one another after all these years!

MISSION BRIEF 12: RED SPRINGS

Water pumps have been installed on the red planet to test liquid water viability in the atmosphere. However, some manual experimentation and configuration is required and you're just the person for the job. All the instructions for what to do are included in the guide. Be careful though, some of the tools you will need are exhaustible and can only be used once, so be careful with them!

Yay... martian plumbing

MISSION BRIEF 13: SAFE ZONE

[PACKET LOSS]

solar storm. This will [PACKET LOSS]

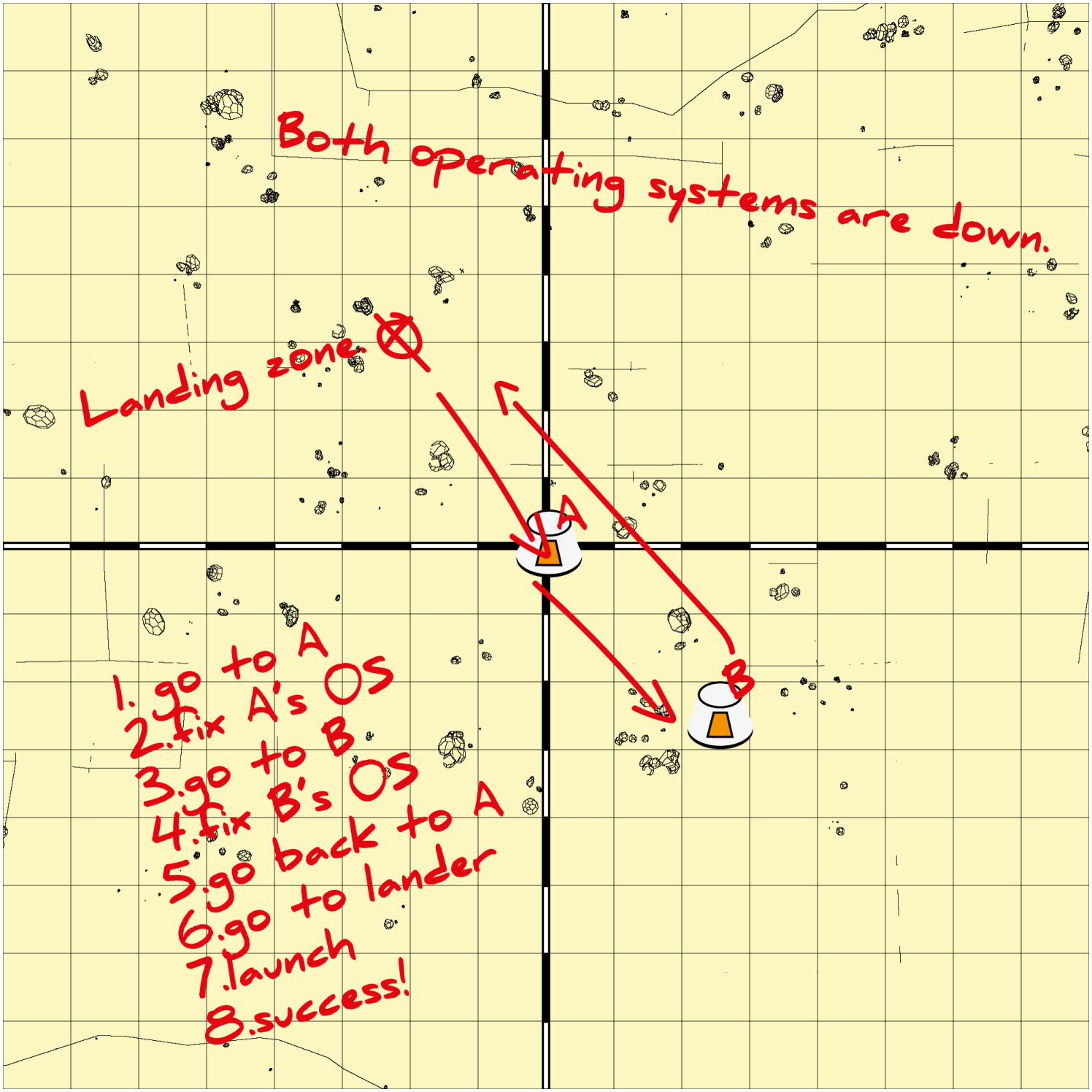
Widespread destruction of many ground-based systems as well as the space station. [PACKET LOSS]

will need to go to this landing zone and find the base inside the cave. The cave will protect the base inside from disruption. [PACKET LOSS]

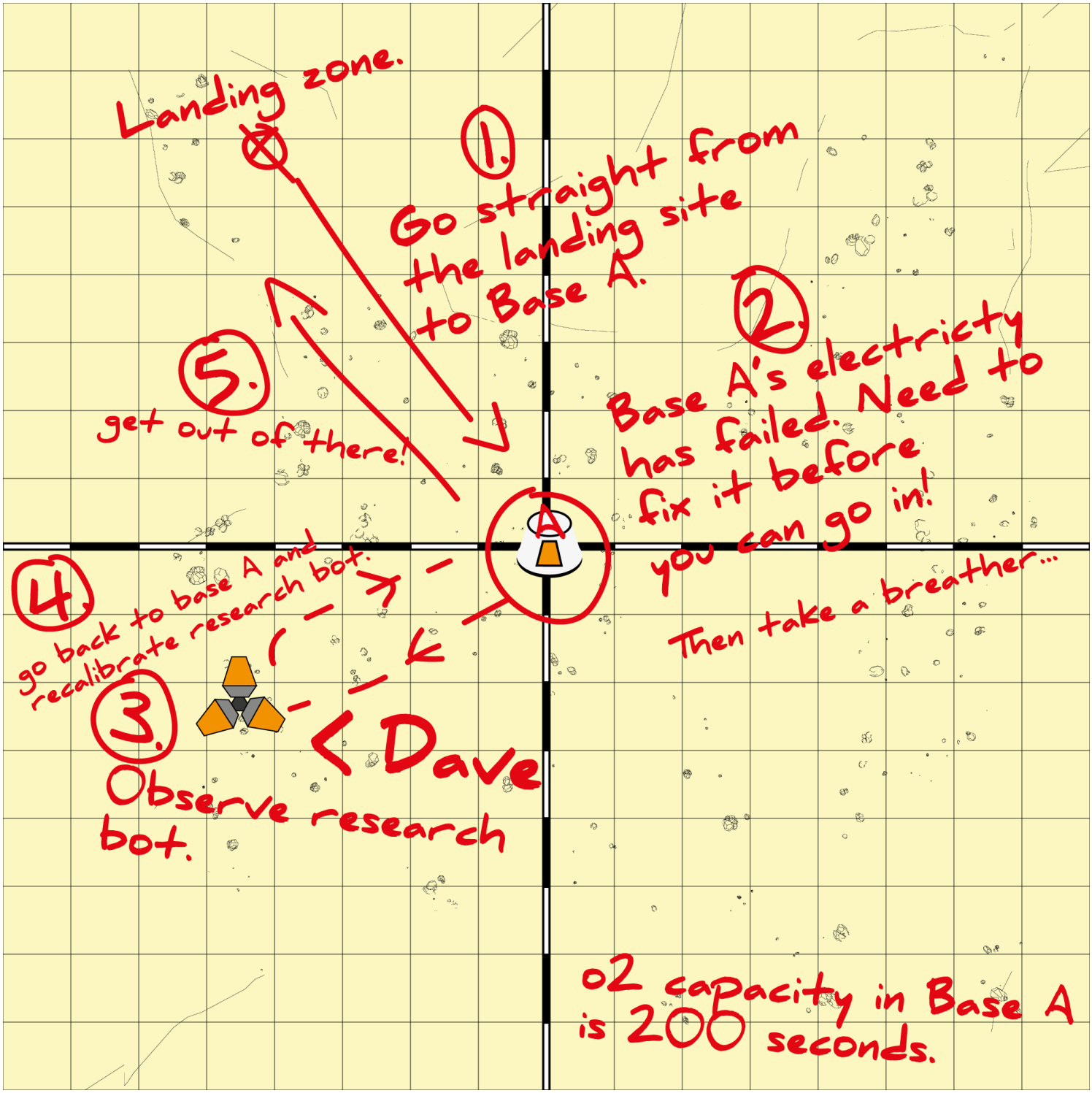
send a Pigeon Heavy Rocket to bring you back to Earth as soon as we can at this landing zone. But estimates range between 12 months and 2 years depending on the scale of damage. We are extremely [PACKET LOSS]

fam [PACKET LOSS] Say they love you.

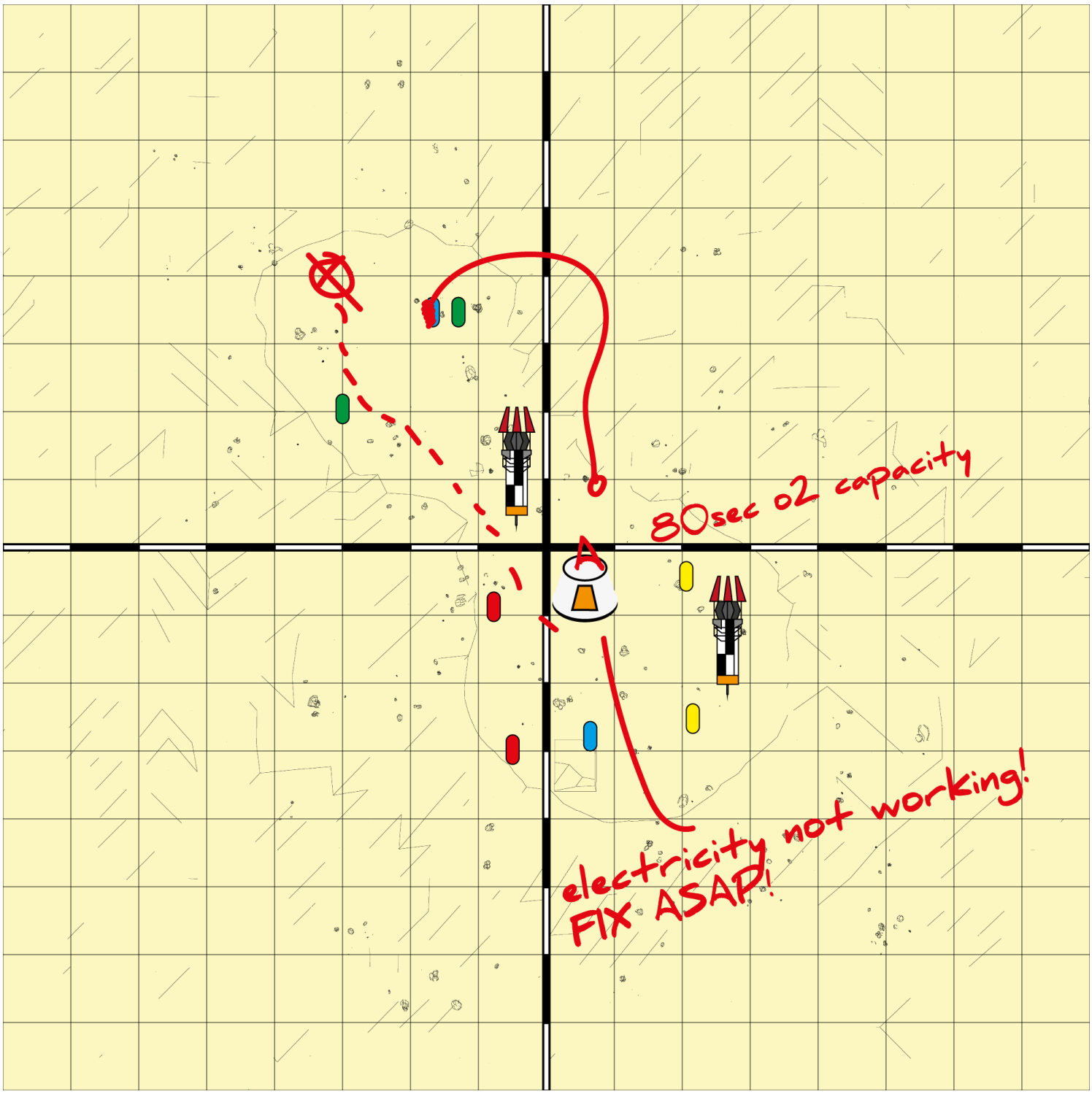
MAP 1


Both operating systems are down.
Landing zone
A
B
1. go to A
2. fix A's OS
3. go to B
4. fix B's OS
5. go back to A
6. go to lander
7. launch
8. success!

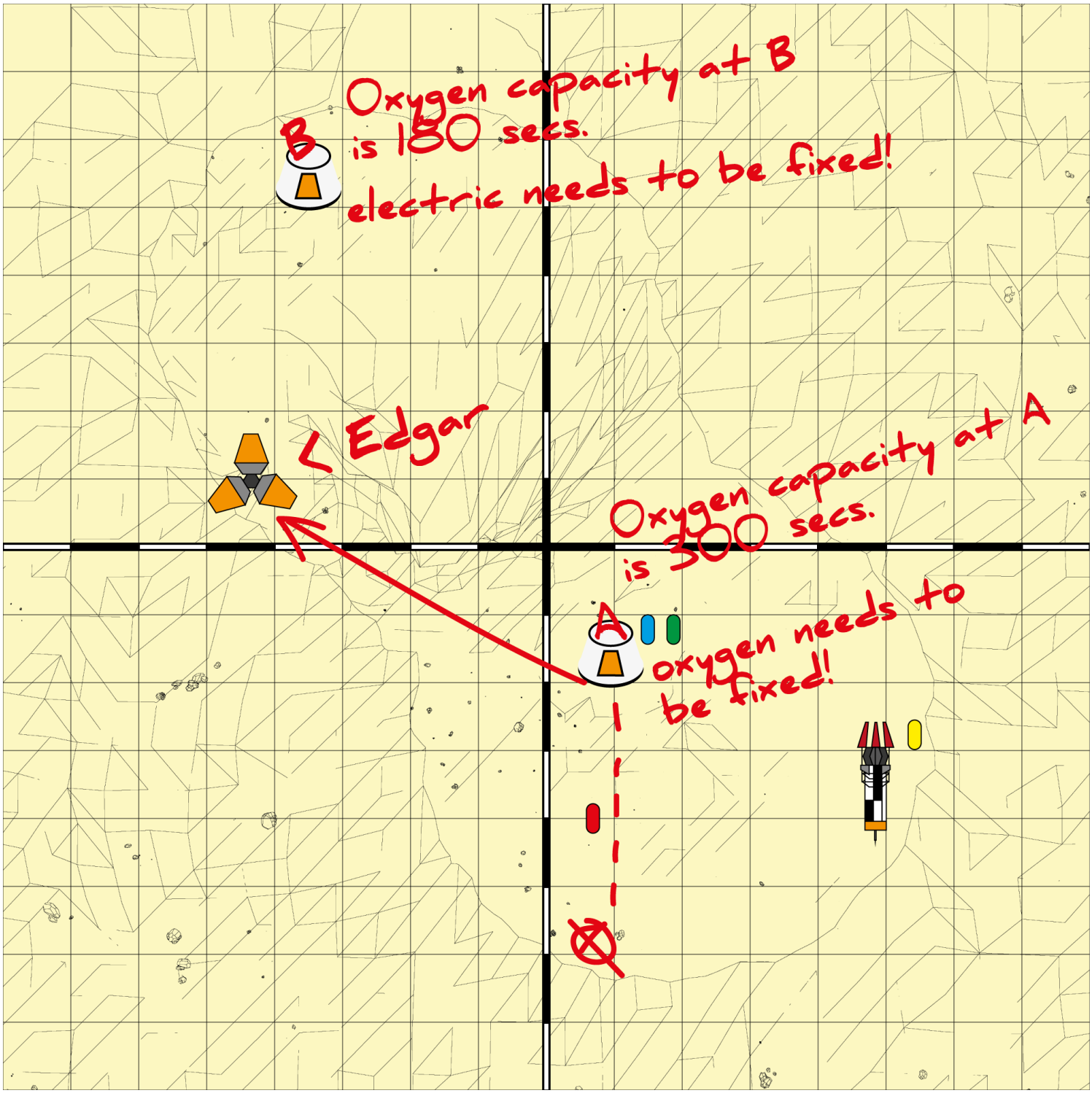
MAP 2


Landing zone.
1. Go straight from the landing site to Base A.
2. Base A's electricty has failed. Need to fix it before you can go in!
Then take a breather...
3. Observe research bot.
Dave
4. go back to base A and recalibrate research bot.
5. get out of there!
A
02 capacity in Base A is 200 seconds.

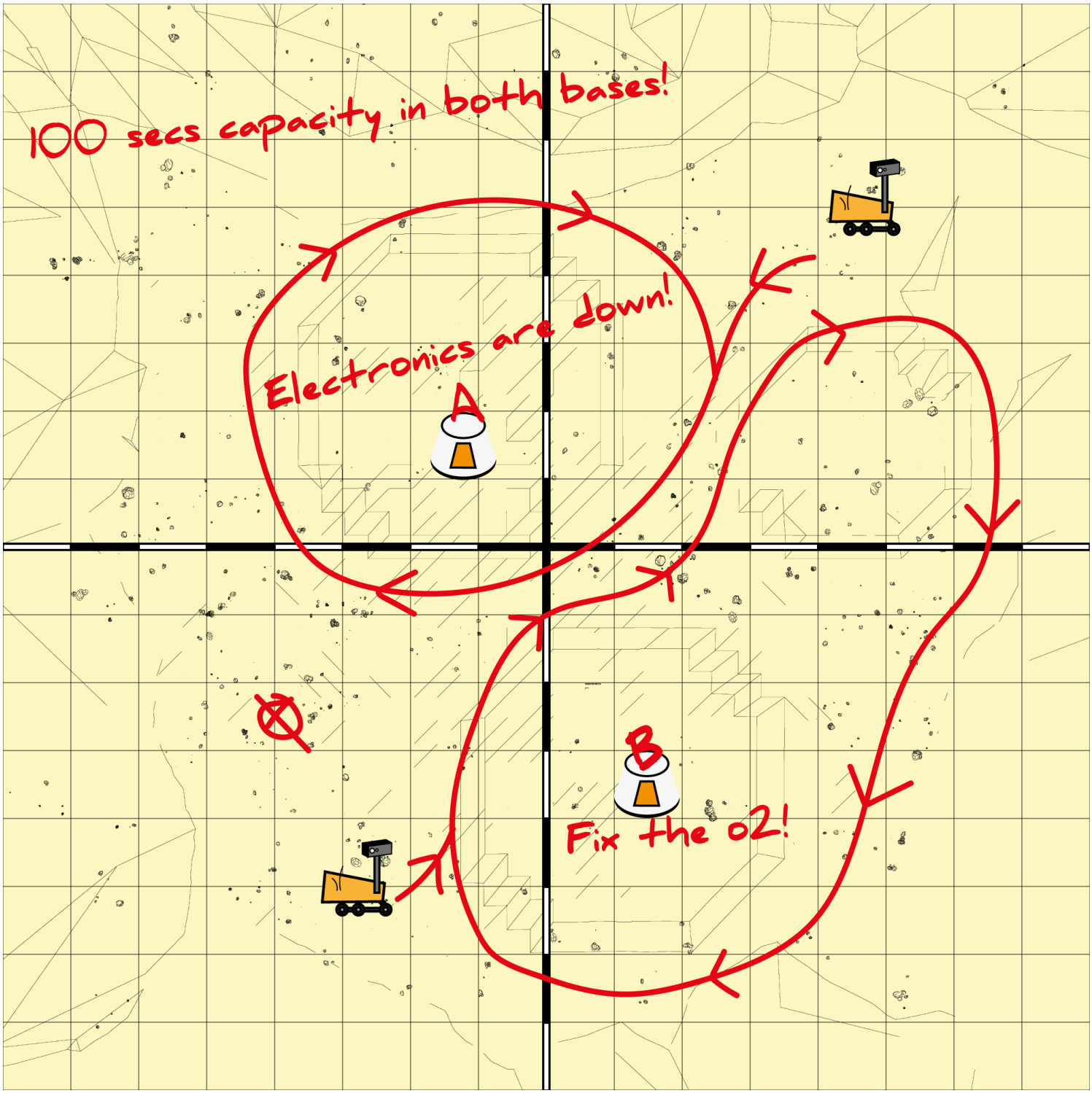
MAP 3



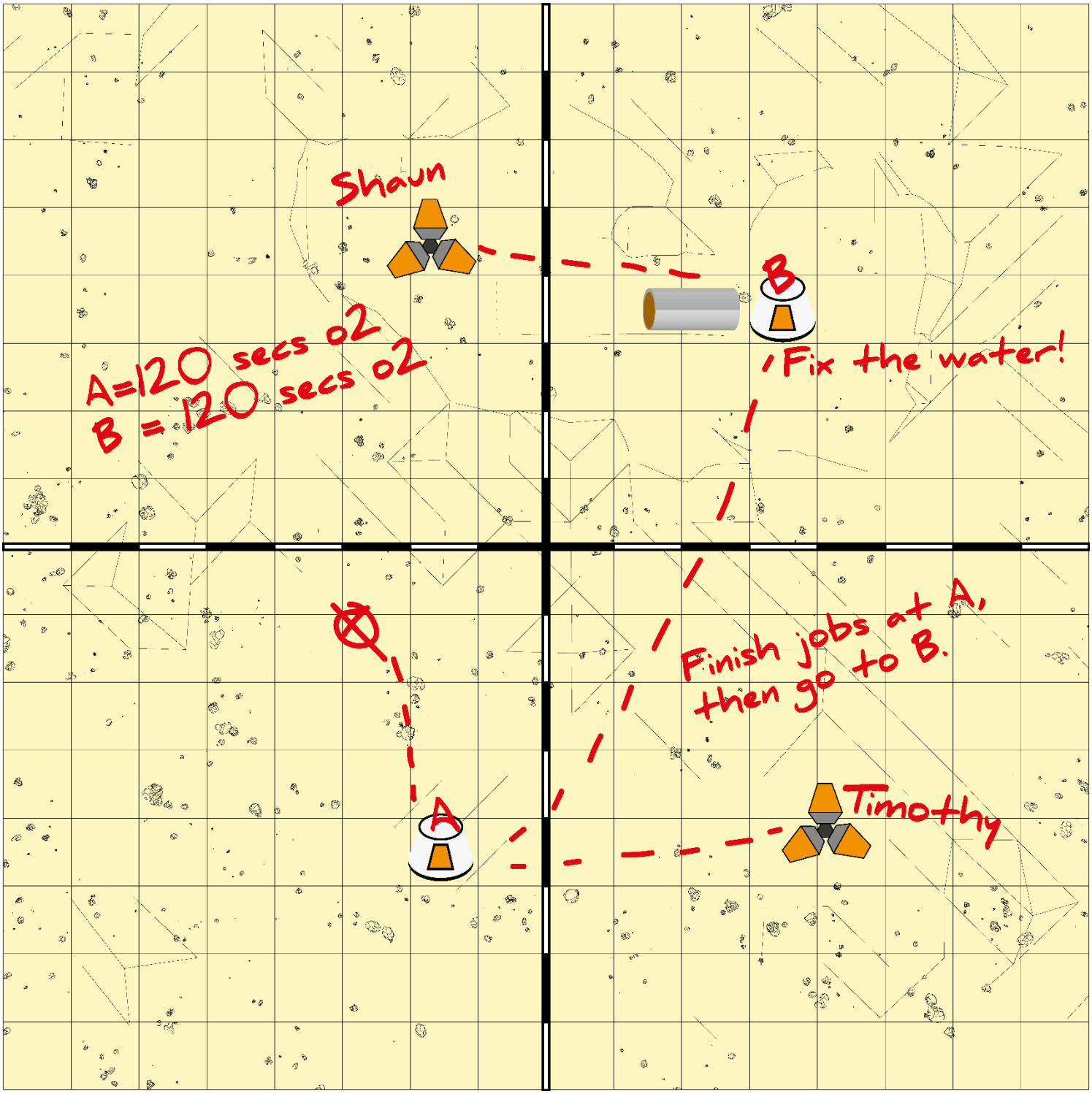
MAP 4


B
Oxygen capacity at B is 180 secs.
electric needs to be fixed!
Edgar
Oxygen capacity at A is 300 secs.
A
oxygen needs to be fixed!

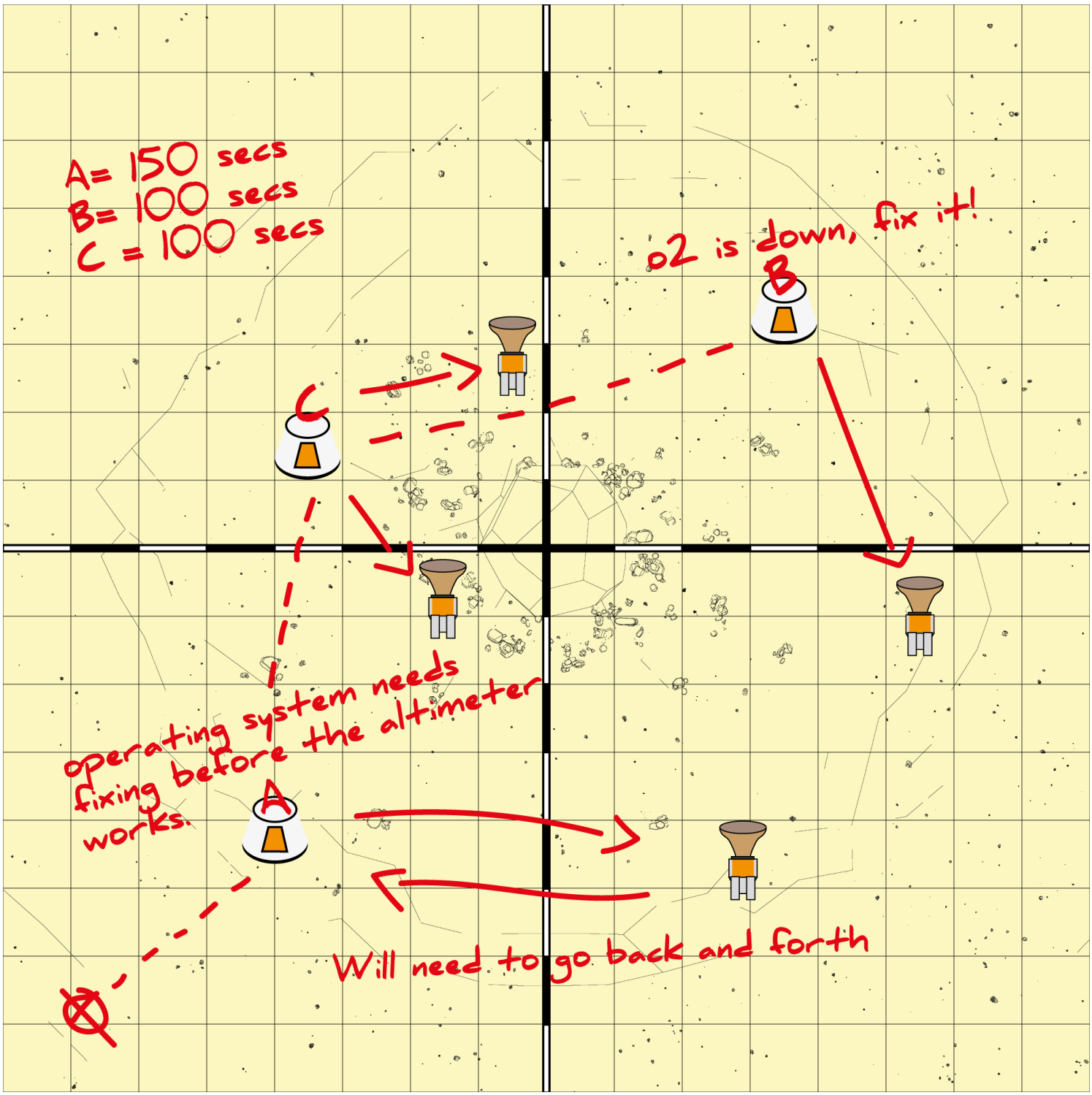
MAP 5


100 secs capacity in both bases!
Electronics are down!
A
B
Fix the o2!

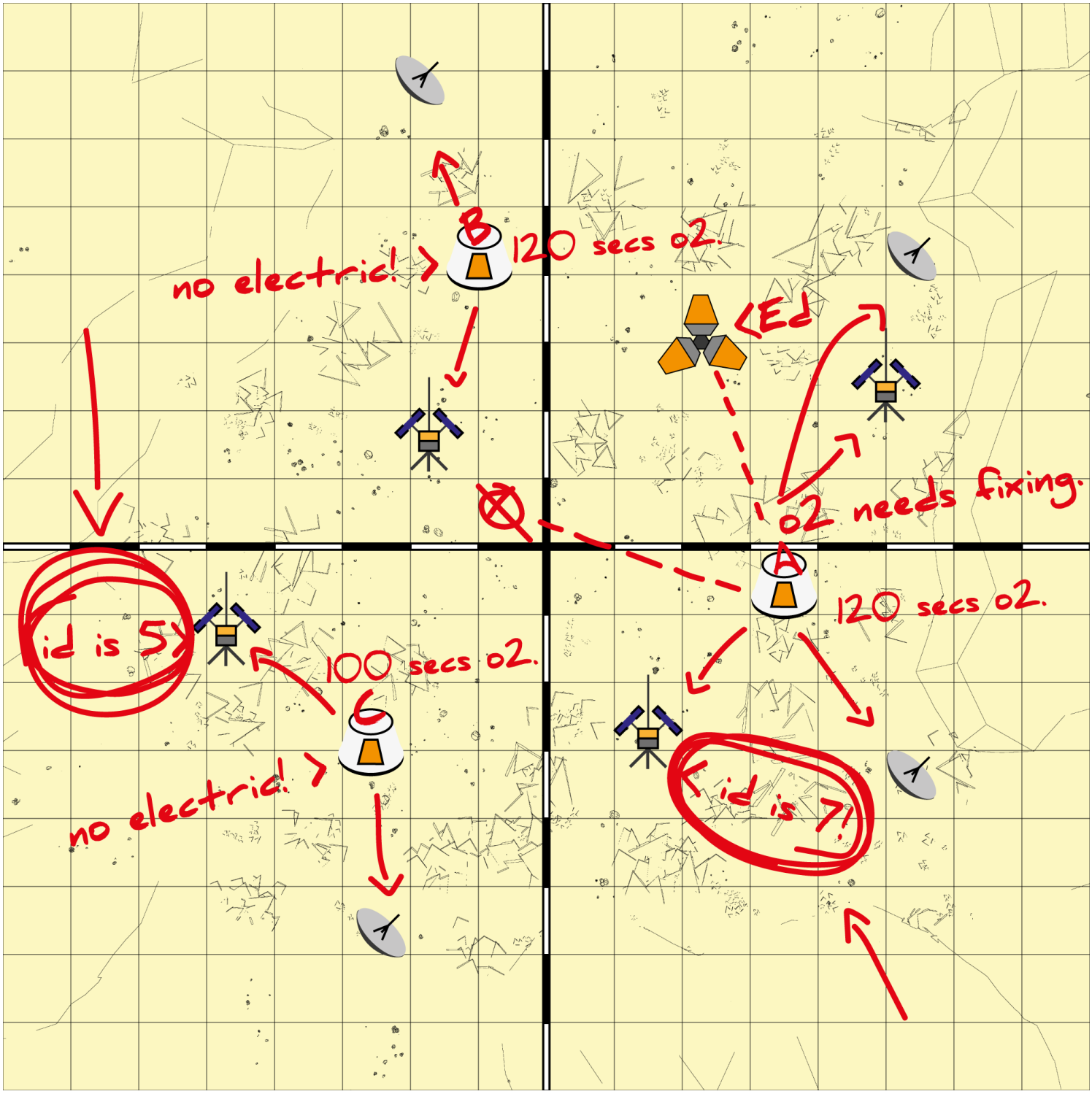
MAP 6


Shaun
A=120 secs o2
B = 120 secs o2
B
Fix the water!
Finish jobs at A, then go to B.
A
Timothy

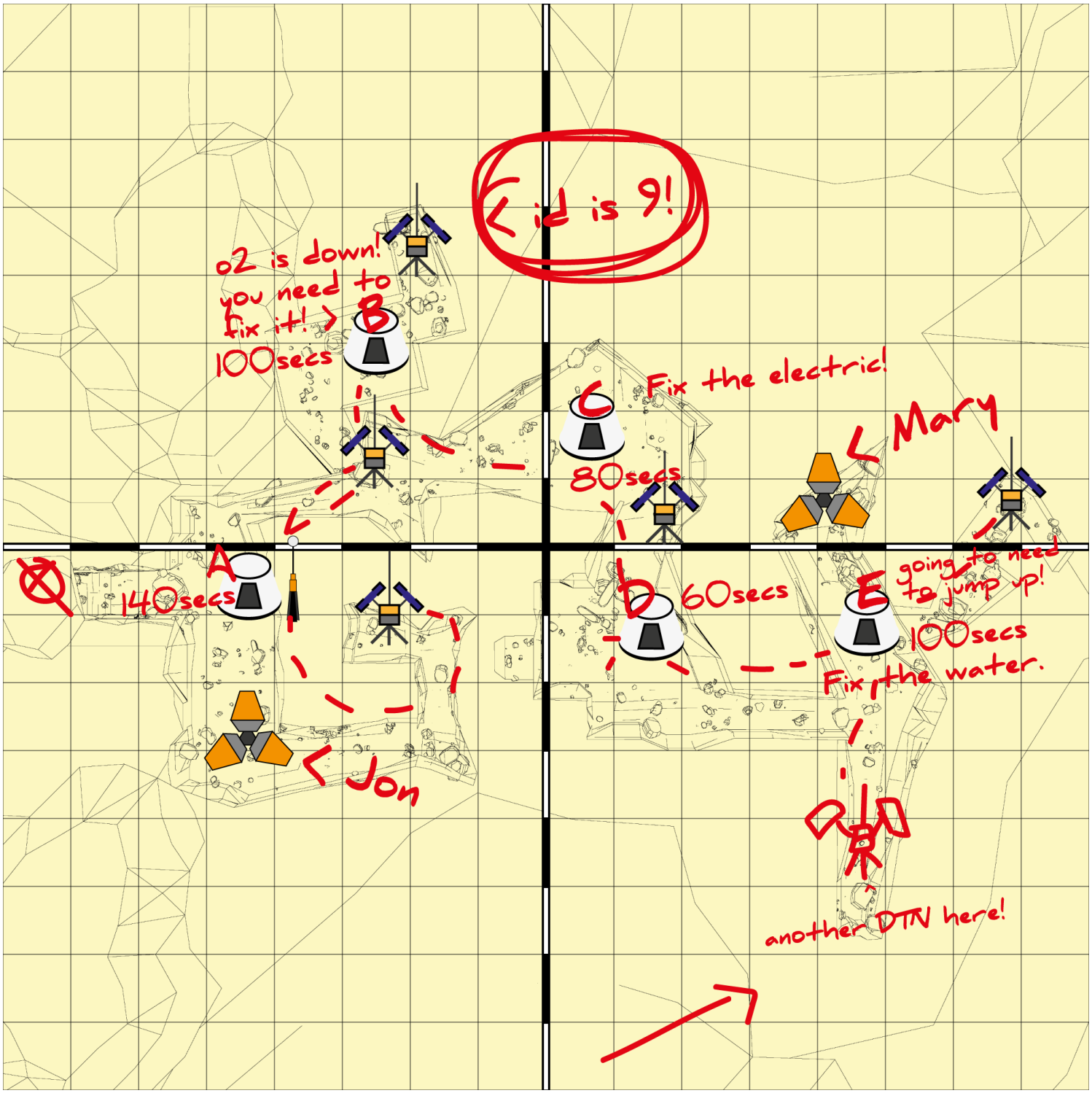
MAP 7


A= 150 secs
B= 100 secs
C = 100 secs
02 is down, fix it!
B
C
operating system needs fixing before the altimeter works.
A
Will need to go back and forth

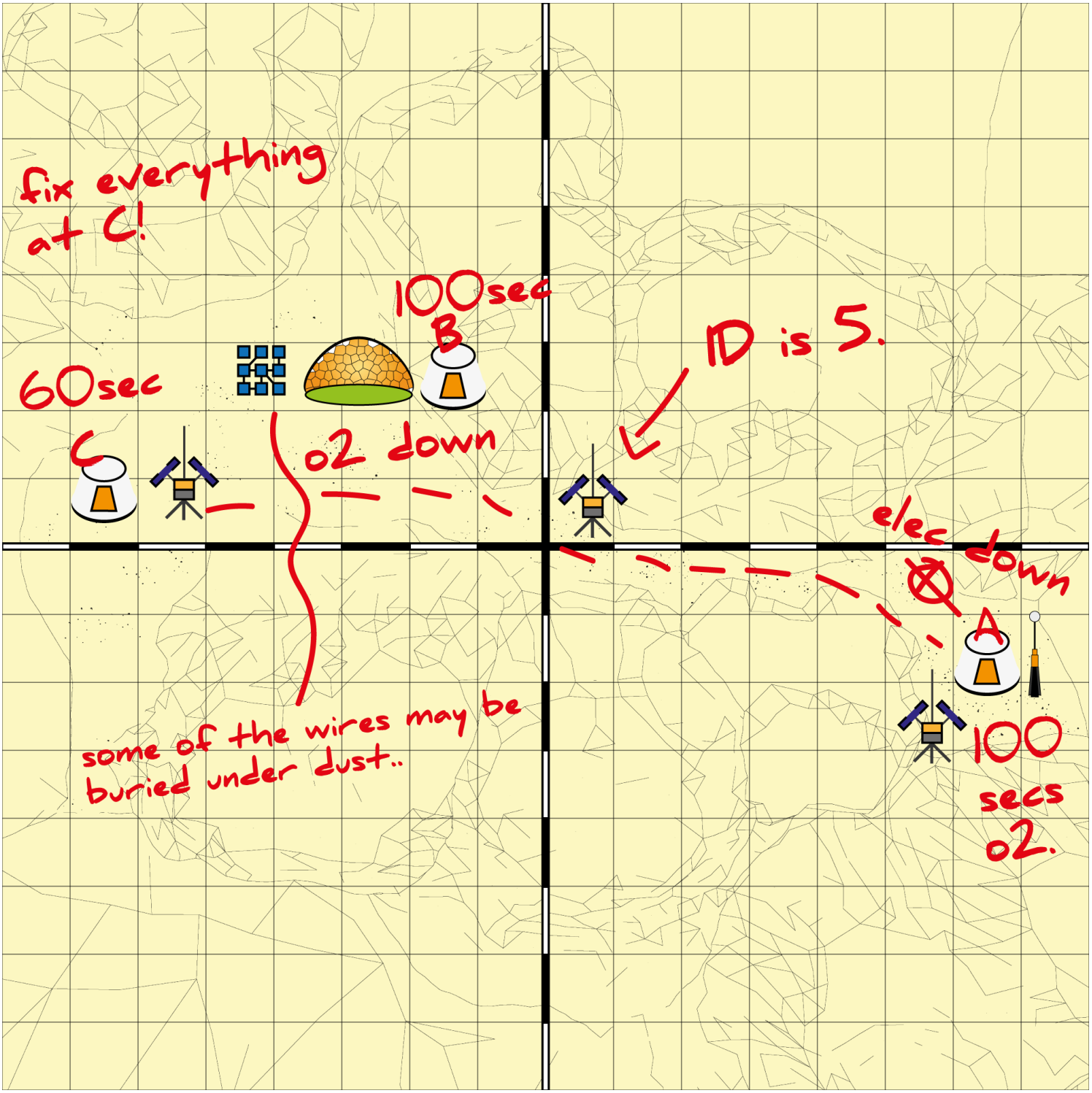
MAP 8


B
120 secs o2.
no electric!
<Ed
o2 needs fixing.
A
120 secs o2.
id is 5!
100 secs o2.
C
no electric!
id is 7!

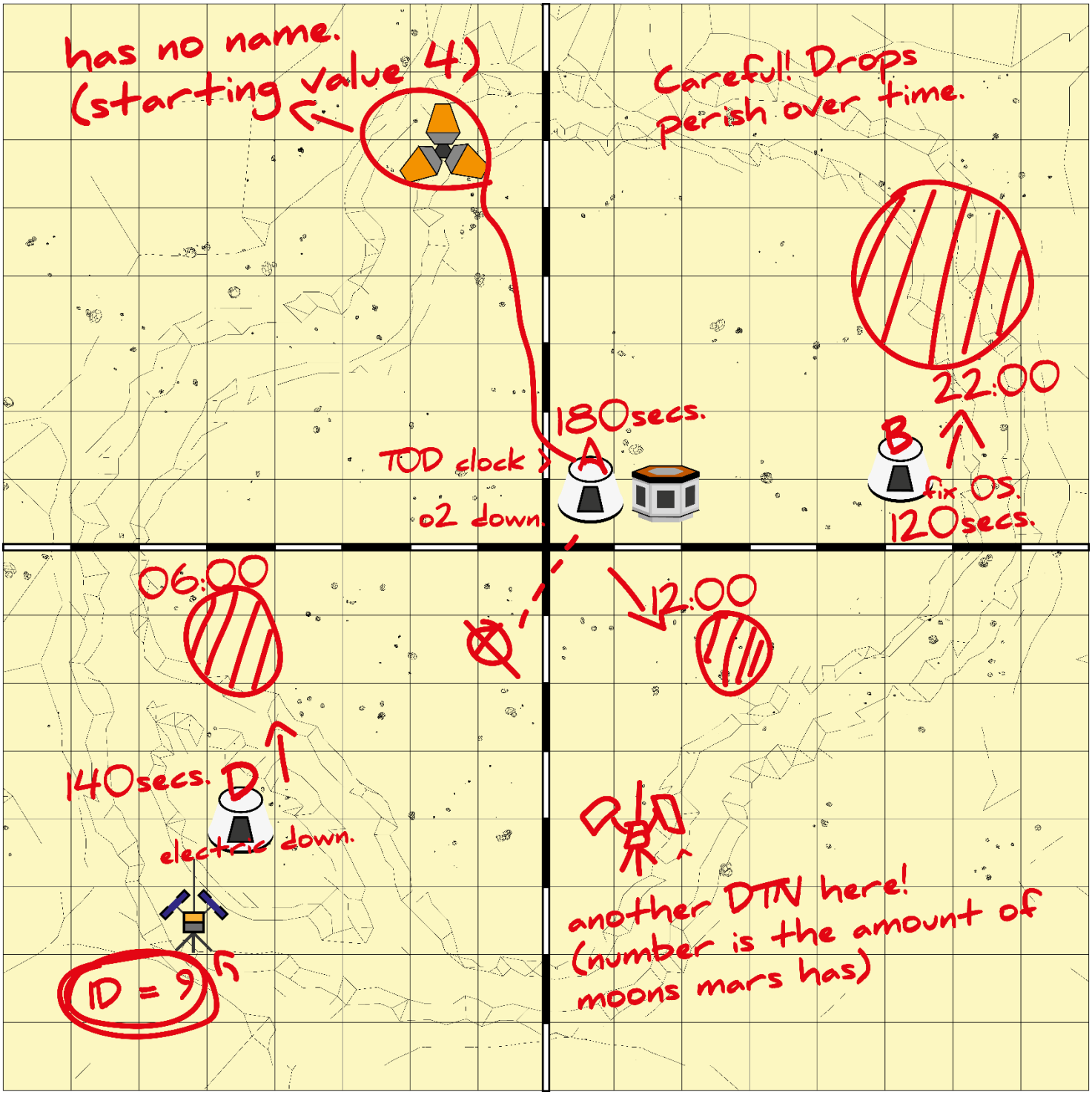
MAP 9


id is 9!
o2 is down!
you need to
fix it!
100secs
B
C
Fix the electric!
80secs
Mary
A
140secs
D
60secs
E
going to need
to jump up!
100secs
Fix the water.
Jon
another DTN here!

MAP 10


fix everything at C!
100sec
B
ID is 5.
60sec
C
02 down
elec down
A
some of the wires may be buried under dust..
100 secs 02.

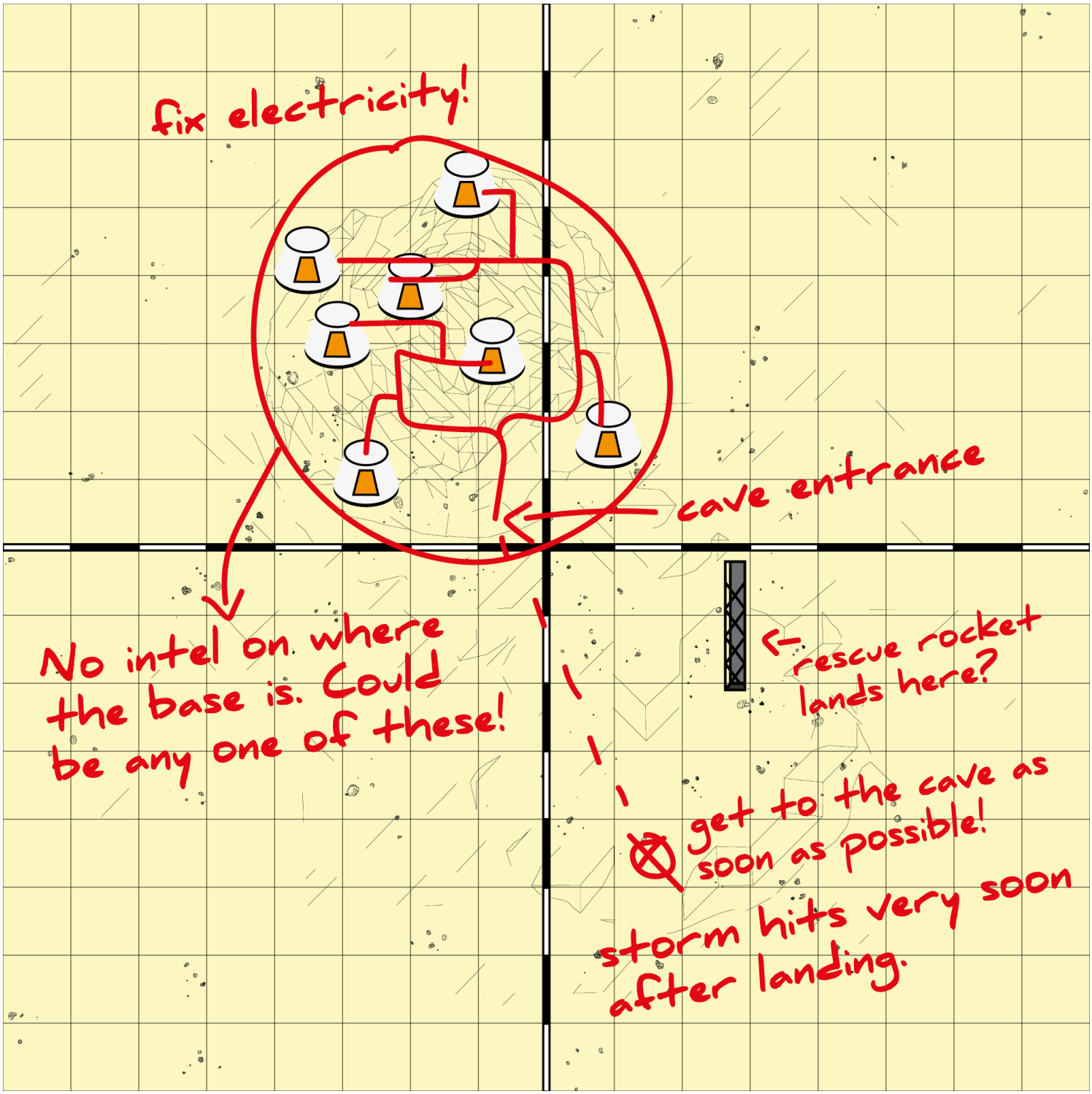
MAP 11


has no name.
(starting value 4)
Careful! Drops perish over time.
22:00
B
fix OS.
120secs.
180secs.
TOD clock >
o2 down.
A
06:00
12:00
140secs.
D
electric down.
ID = 9
another DTN here!
(number is the amount of moons mars has)

MAP 12

ph tablets in each base!
140 secs o2..
A
fix electricity
B
200 secs o2.
Elizabeth
C
160 secs o2.

MAP 13


fix electricity!
cave entrance
No intel on where the base is. Could be any one of these!
rescue rocket lands here?
get to the cave as soon as possible!
storm hits very soon after landing.