

THE OFFICIAL GUIDE

PORTAL 2™



FUTUREPRESS

VALVE®

00

01/10

The Extended Relaxation Center



- 01** Upon being awakened in the Relaxation Center, you will be required to go through a number of tests to ensure that there has been no loss of physical or mental functions during the suspension period. The first two tests simply require the player to look up and down as instructed when the buzzer sounds; if the camera is not orientated to your liking, use this opportunity to enter the controller options and change the look type so that it matches your preference.

For the next test, you will need to locate the small framed picture to the side of the bed when instructed and look at it for a short period of time to reinvigorate your mental functions [→□ 01]. A brief piece of classical music will play after looking at the artwork to further stimulate mental functions, and once that is over, you will need to return the bed and press the Use button to begin sleeping once again.

- 02** After being in suspension for quite some time, you will receive a courtesy wake-up call from the Enrichment Center, and at the same time you will be able to hear a voice calling from the other side of the room's door. Walk over to the door to open it and be greeted by Wheatley. After entering the room and making sure you are all right, Wheatley will enter a hatch in the ceiling and the emergency escape procedure will initiate.

After a short time, Wheatley will drop back down through the hatch and start asking you a couple of questions. Follow the on-screen prompts to complete the tests, after which a voice will come over the loudspeaker letting you know that a reactor core meltdown has begun. Wheatley will continue to explain the situation while he tries to move your room through the testing facility to safety [→□ 02]. The room will start to fall apart around you as it crashes into other rooms and buildings, but it manages to stay intact enough so that you are never in any risk of falling out.

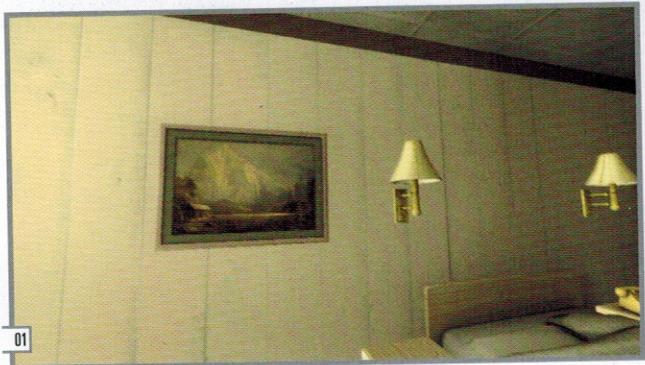
- 03** After completing the manual override on the wall, the front of the room will be totally destroyed creating an opening that you can step through. Drop down onto the rubble below your room and



then step out onto the broken glass roof so that you can drop down through it. Once again, you will find yourself in the Aperture Science Enrichment Centre and even though there is a crisis going on in the facility, there are protocols in place to ensure that testing can continue.

Wait for the portals to open, and then step through it and follow the path around the room to the door on the other side and step through it. In order to continue past this point you will need to complete your first test. A series of blue lights can be seen coming out along the floor from the button and these are always used to indicate what pressing a button, or other input device, will activate once triggered. If you step on the button you will see that the exit door opens, but as soon as you step off it, the door will close again.

Clearly you need something to stay on the button in your place to keep the door open, and thankfully there is a Cube Dispenser in the same room. Walk over and pick up the cube that drops out of the dispenser, and then place it down on the button so that the door stays open [→□ 03]. Walk through the series of doors and past the Emancipation Grill to reach the elevator and step into it to reach the next Test Chamber.

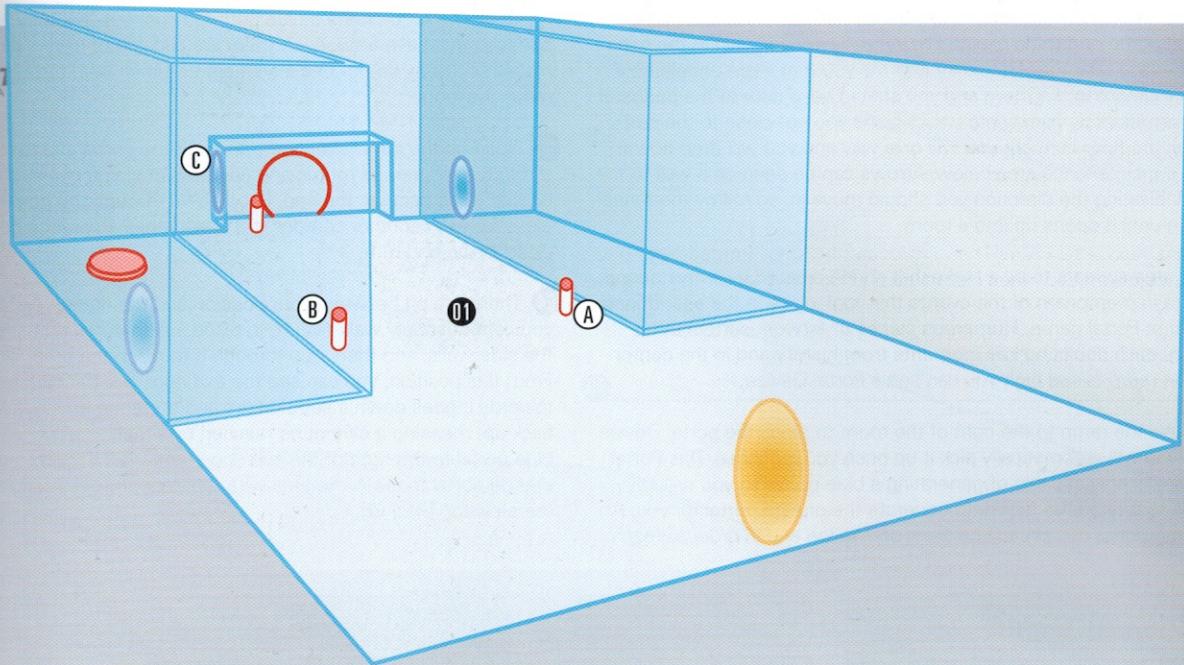


01

Emergency Test Chamber 01

07_003

The aim of this test is to use the switches in front of each sectioned off chamber to generate a portal inside it, so that you can get the Weighted Cube from the chamber on the right, into the one on the left.



① Head up the stairs after exiting the elevator and then drop down into the room at the end of the corridor. Start by pressing the switch at Position A so that a portal opens up in the room with the cube. Enter the room through the portal near the entrance, and then pick up the cube and carry it back through the portal into the main room. Leave the cube on the ground near the portal in the main room, and then walk over and press the switch at Position B to open a portal into the room with the button.

Now pick up the cube and step through the portal so that you can drop the cube onto the button and keep the exit door open. Go back through the portal into the main room, and then press the switch near the exit door to open another portal on the wall at Position C. Step through the entrance portal again and head down the stairs through the Emancipation Grill into the elevator.

02

Emergency Test Chamber 02

03/10



07_004

01 Follow the corridor after the elevator ride and head down the stairs at the end to be greeted by Wheatley once again in the ruins of the Test Chamber. Wheatley informs you that there should be a Portal Device in the room and you should head over to the pedestal in the middle to investigate [→□ 01]. As you get close to the pedestal, the floor beneath you will give way and you will drop down into a maintenance area below. Arrows can be seen on a wall to the left indicating the direction you should move in, so follow the tunnel along until it opens up into a room.

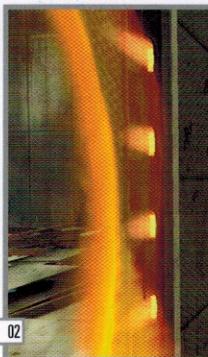
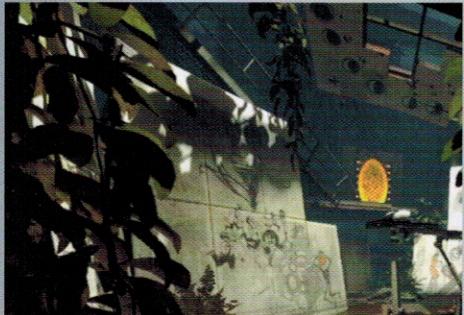
This area appears to be a makeshift shrine created by a mysterious figure in memoriam of the events that took place in the past during the first Portal game. Numerous pieces of artwork surround the room, each depicting key moments from history and in the center of the room raised high you can see a Portal Device.

02 Use the ramp to the right of the room to reach the portal Device and you will automatically pick it up once you get close. This Portal Device is only capable of generating a blue portal so you will still need to rely on the facility to generate the orange portal for you. An orange portal can already be seen on a ledge and in order to reach

it you will need to create a blue portal to connect to it. Any of the surfaces that have artwork on them are capable of having a portal placed on them, so put one anywhere and then step through it to reach the ledge.

03 Head up the ramp after going through the portal and then walk through the series of rooms and corridors until you come to a broken glass panel at the end. Drop down through the hole in the glass to reach another corridor that already has an orange portal in place at the end of it.

04 There is a pit between your position and the orange portal so you cannot simply walk over to it; place a blue portal on either of the side walls, and then step through it to reach the other side. From this position, you can see the exit door, but the path leading towards it goes down a set of stairs and there are no stairs leading back up, meaning it cannot be reached by simply walking. Place a blue portal to the right of the exit door, then walk back through the orange portal to reach the area with the door and go through it into the elevator. [→□ 02].



03

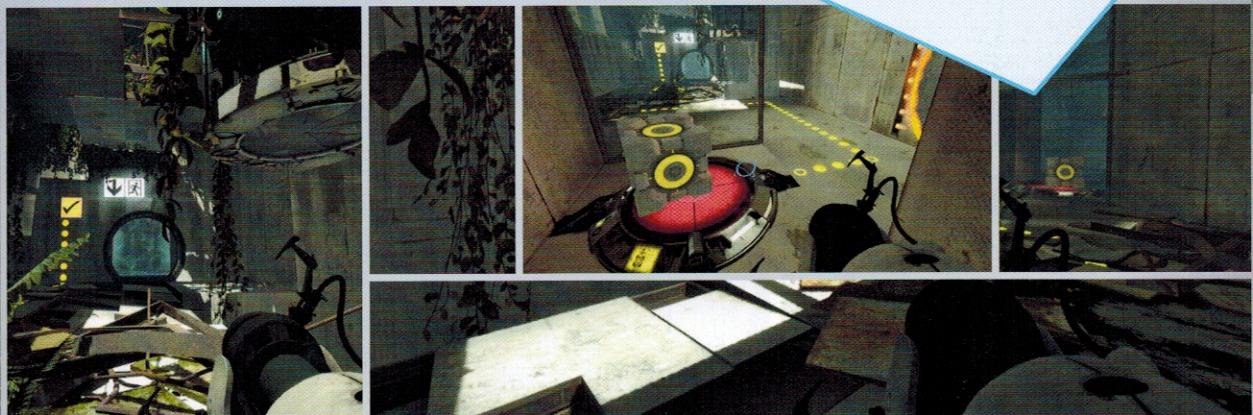
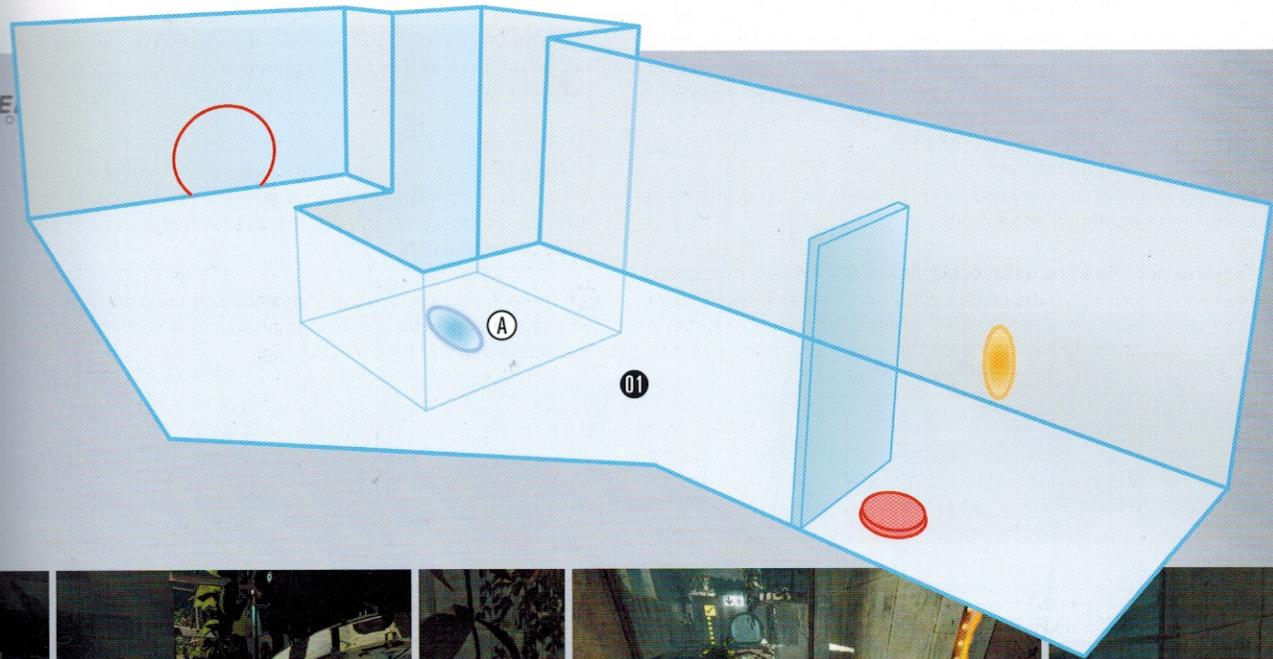
04/10

Emergency Test Chamber 03

The goal of this test is to find a way of getting the cube out of the pit and onto the button. To accomplish this you will need to use the blue portal to create a path leading into the pit.



07_005



03 Rather than dropping down to get the cube, you can simply place a blue portal at Position A, directly underneath it, so that the cube falls through the portal, and out of the orange one on the wall 03. All you need to do then is pick up the cube from the floor near the orange portal and place it onto the button to open the exit door. The next Test Chamber is just on the other side of the door so go through it when you are ready.



Aperture Information Service

Once you are familiar with the area of the pit that the cubes fall onto, this can be a very good place to attempt to get the Drop Box Trophy/Achievement. As soon as you approach the dispenser, fire a blue portal onto the floor of the pit where the cube will land, before it starts to drop. The extra momentum you will gain from the box dropping directly into the portal is easily enough for it to fly out of the orange portal and straight onto the button.



03

04

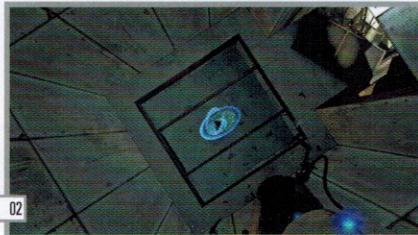
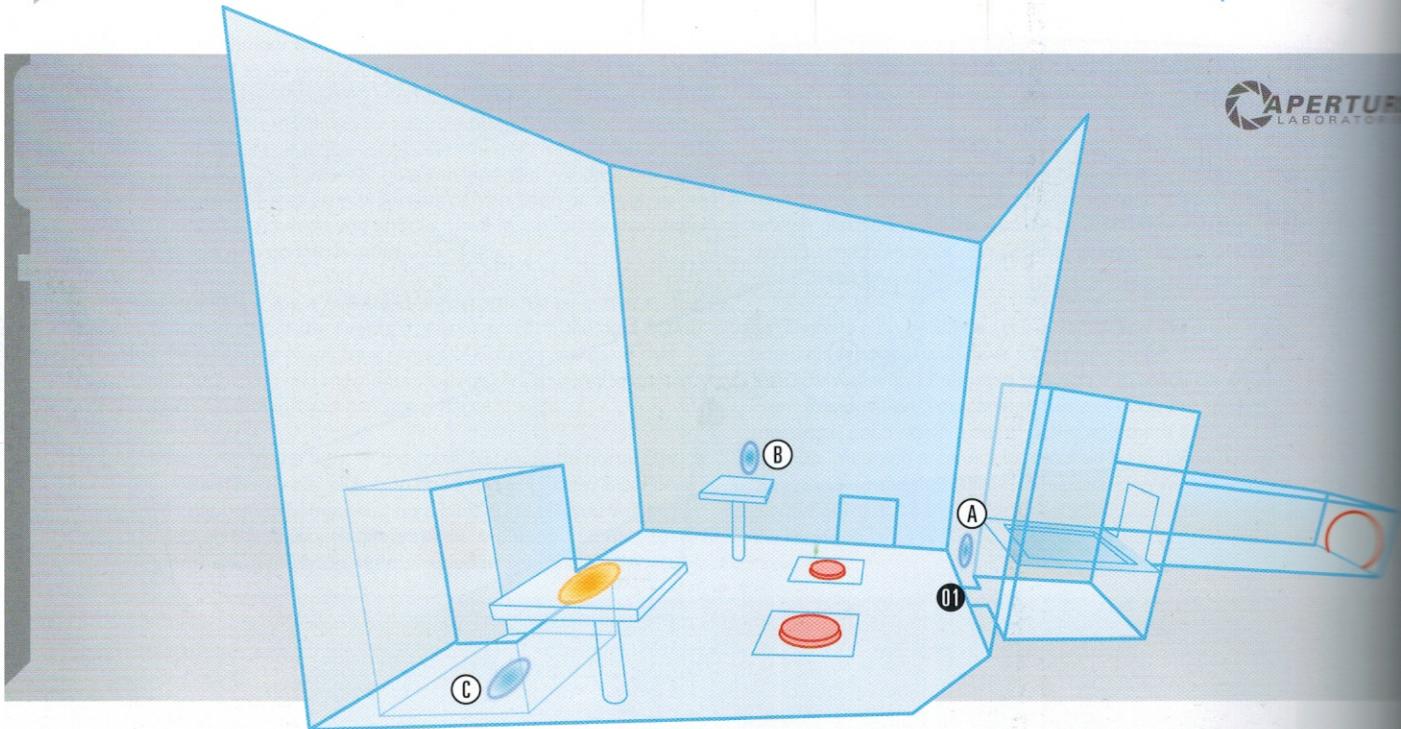
Emergency Test Chamber 04

05/10

The aim of this test is to find a way of getting both of the cubes off of the raised platforms they are on, and onto the buttons on the floor below. To do this you will need use a combination of the blue Portal Device, and the pre-placed orange portal.



07_006



01 Place your blue portal at Position A and then step through it so that you exit onto the ledge at the back of the room. From there, create a blue portal on the wall behind the cube on the opposite platform (Position B), and then turn around and walk through the orange portal so that you are on the platform with the cube [→□ 01]. Pick up the cube, and then drop down from the platform and place it onto one of the buttons.

Place another blue portal on one of the walls so that you can go through it and get back onto the platform. From there, you can simply place a portal beneath the second cube in the pit (Position C) so that it falls through it, onto the platform you are already

standing on. All you need to do then is pick up the second cube and drop down to place it on the second button and the exit door will open.



Aperture Information Service

A slightly faster way of completing this test is to simply throw the cubes from the elevated platforms onto the buttons below. By moving forward slightly before you release the cube you can generate enough forward momentum so that it can reach the button below with the correct timing. Using this method, you will bypass the need to portal back up to the platforms after placing the cubes on the buttons and save a lot of time.

02 As you walk through the exit door it will close behind you, sealing off your ability to go back and leaving you momentarily trapped in a small room with a glass roof. After a short period of time an orange portal will appear on the ceiling above the glass; once this portal appears, fire a blue portal onto the floor of the room you are in so that you drop down from the orange one above, onto the glass. [→□ 02]

The glass panel will collapse slightly and form a makeshift ramp that you can walk up and although the path ahead is blocked by debris, you can use the room on the right to bypass it and go straight to the elevator.



Aperture Information Service

If you go up the stairs in this room you will come to an office that contains more mysterious artwork on the walls to look at.

05

07_007

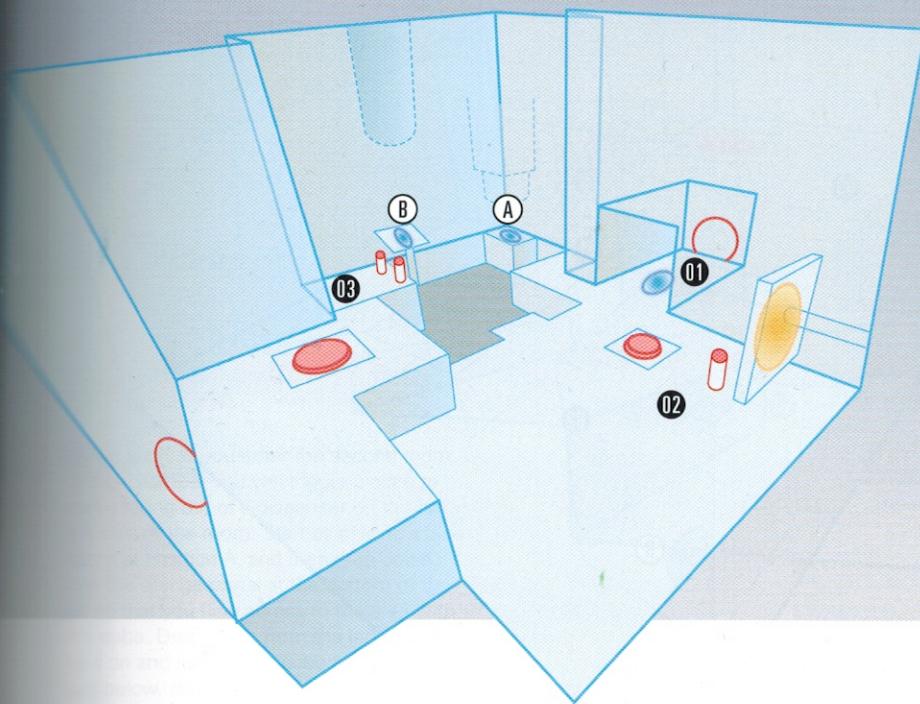
Emergency Test Chamber 05



07_007

To complete this test you need to find a way of reaching the raised area and placing a cube onto the button to open the exit. To accomplish this, you first need to create a path up to the raised area by using another cube; the only means of getting either cube is through the use of your blue portals.

APERTURE LABORATORIES



Aperture Information Service

By using some advanced techniques, it is possible to solve the test in this chamber using only one cube, greatly increasing the speed at which you can complete it. Start the chamber as usual by placing a blue portal under the Cube Dispenser in the far right and then press the switch to activate it. Catch the cube as it comes flying out of the orange portal, and then walk over to the raised area.

If you aim up high enough while carrying this cube it is possible to place it directly onto the raised area ready for use on the exit door button. Without the ramp you will need to make use of portal ledges to make your way up the area where the cube awaits. Place a blue portal on any wall and then start to step through it but stop as soon as the color of the portal changes from blue to orange. When this happens you will be standing on a ledge created between the portals, and from there you can place another blue portal onto one of the walls near the exit.

Collapsing the first blue portal will cause you to be pushed through the orange one, so the instant you create the second blue portal you will need to move back through the orange one or you will simply fall to the floor below. If you are having trouble with the timing for making it back through the orange portal in time, you may want to try jumping back into it since this gives you slightly more time.

1 Your path ahead will initially be blocked by debris when you first enter this chamber, but after a short time an orange portal will appear in the room on the other side, up high on a section of the wall to the left. Place a blue portal on the portalable section of the floor just in front of the debris so that you can fall through it, into the room on the other side. [→ 03]

2 There are quite a lot of elements involved in solving the test in this chamber but the steps required to complete it are quite simple. To begin with, press the nearby switch to activate the cube dispenser in the far right so that a cube drops down onto the platform below it. Place a blue portal at Position A so that the cube falls through it and emerges from the orange portal that you used to enter the room. Pick up the cube and place it on the button so that the ramp to the raised area to the left is activated.

3 The section of floor below the second cube dispenser is angled, so any cube dropping straight down onto it will simply slide off into the moat and be destroyed. Placing a blue portal at Position B will enable the cube to pass out of the orange portal as usual, but because of the height it is dropping from it will have too much momentum when it passes through the portals and will again end up rolling into the moat.

To stop this from happening, you will need to press the right switch shortly after pressing the left one so that when the cube passes through the portals the section of floor is still raised, stopping the cube from rolling into the moat [→ 04]. All you need to do then is go down and pick up the cube from its resting place, carry it back up the ramp, and then drop it onto the second button so that the exit door remains open and you can pass through to the elevator.

06

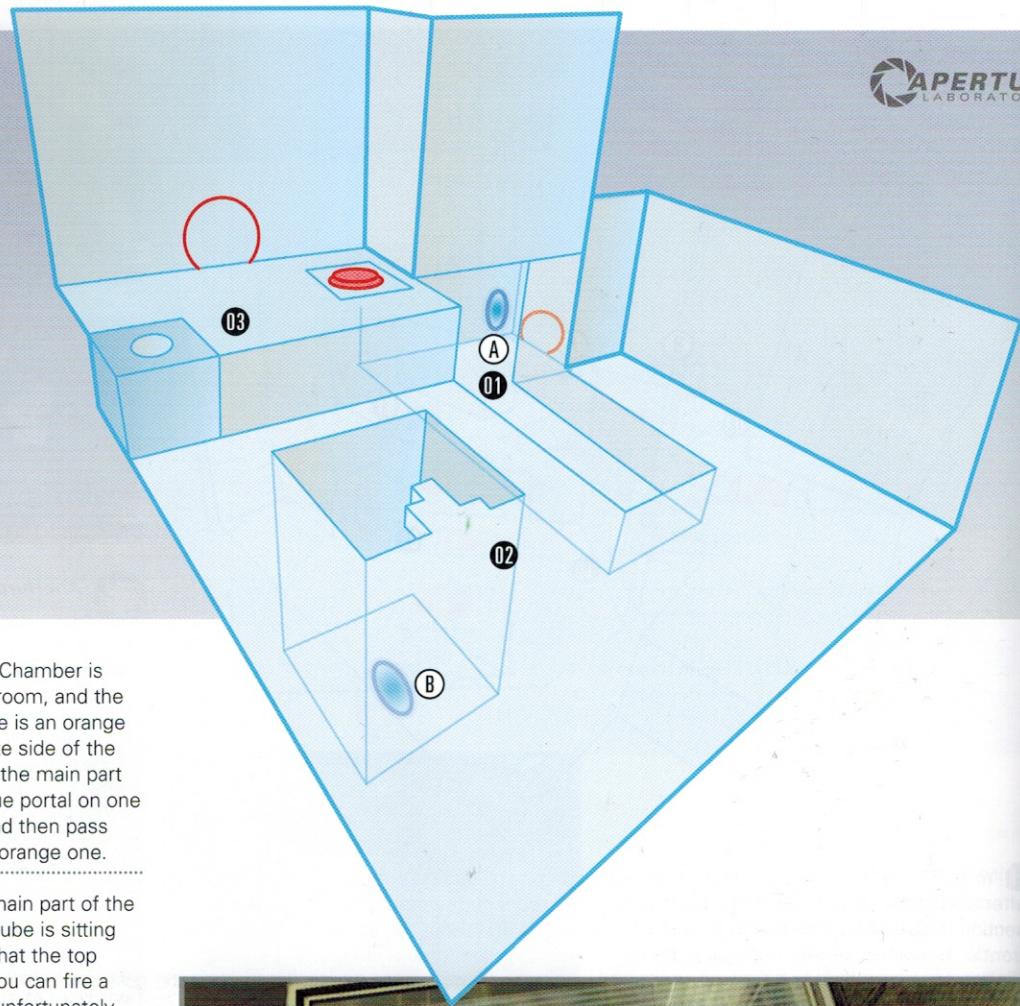
07/10 ■■■■■

Emergency Test Chamber 06 – A



07/08

To complete the test you will first need to find a way of getting up to the raised area and acquire the cube and then find a way to place it onto the button. To accomplish this you will need to make use of the deep pit to generate momentum and then use the portals to create a fling.



APERTURE LABORATORIES

AP

01 The entrance to this Test Chamber is in a lower section of a large room, and the only thing immediately visible is an orange portal up high on the opposite side of the room. The only way to reach the main part of the room is to create a blue portal on one of the walls by Position A, and then pass through it to drop out of the orange one.

02 Now that you are in the main part of the room, you can see that the cube is sitting on a portalable surface and that the top glass panel has a hole in it. You can fire a portal through the hole, but unfortunately, you will need to be on the raised area before you can take advantage of this. Place a blue portal at the bottom of the pit (Position B) and then drop down into it so that you fling out of the orange portal and onto the raised area.

03 From this position, you can fire a blue portal through the hole in the glass that will cause the cube to drop out of the orange one [→□ 01]. Drop back down to the area below and then place another blue portal at the bottom of the pit before picking up the cube and dropping down through the portal again. If done correctly, both you and the cube should successfully fling across the room and you can simply drop the cube onto the button and head through the airlock.

01 As of thi come left si portal into the cu land o just be

02 Wi over to and lo onto the cube, door a and the blue po be fling area be

[→□ 02] Pick up glass s button landing the sam the roo from the elevato



Emergency Test Chamber 06 – B

To complete the test you will again need to use portals to generate the momentum for a fling, and then use the flings to acquire the cube, get it to the button and then reach the exit.

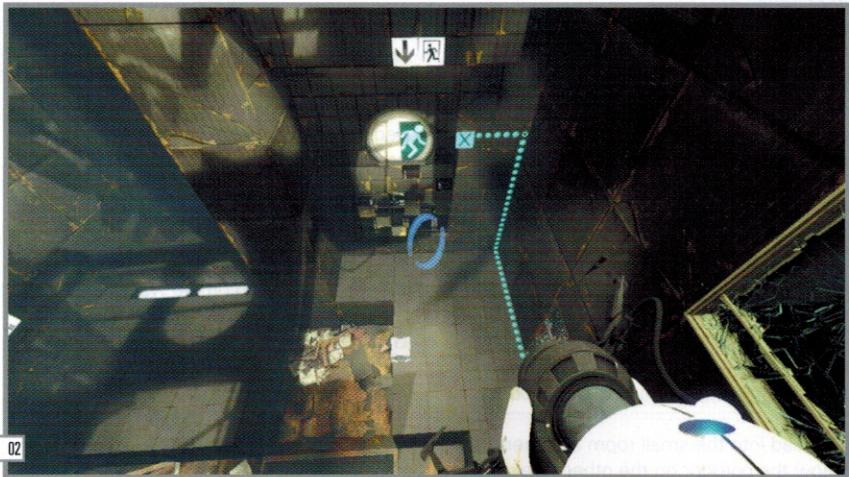
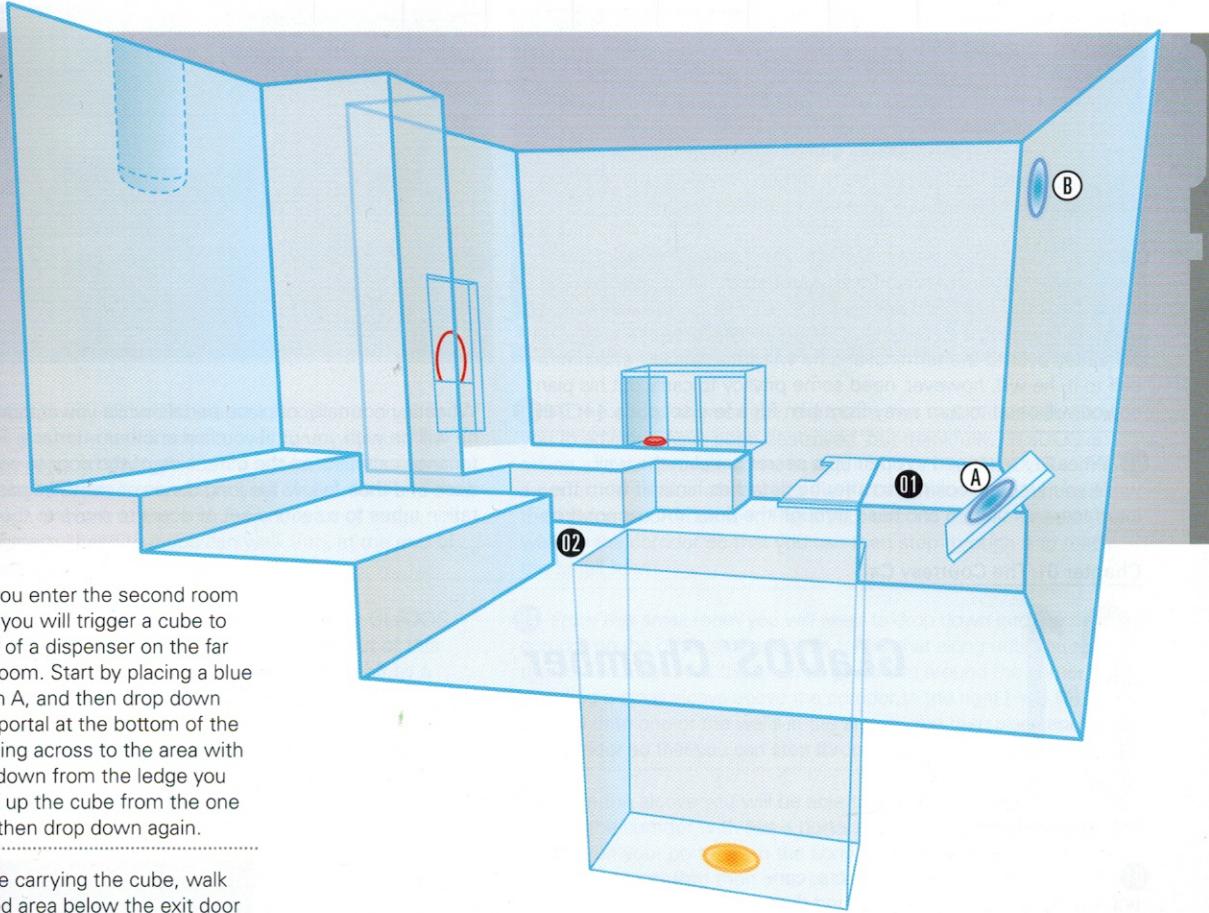


⑩ As soon as you enter the second room of this chamber you will trigger a cube to come falling out of a dispenser on the far left side of the room. Start by placing a blue portal at Position A, and then drop down into the orange portal at the bottom of the pit so that you fling across to the area with the cube. Drop down from the ledge you land on and pick up the cube from the one just below, and then drop down again.

⑪ While you are carrying the cube, walk over to the raised area below the exit door and look up so that you can drop the cube onto the floor above. After dropping the cube, look up to the left of the entrance door and place a blue portal at Position B and then drop back down into the pit. If the blue portal was placed correctly, you should be flung across the divide and land in the area below the exit door near the cube.

[→□ 02]

Pick up the cube and carry it around the glass so that you can drop it onto the button to open the door and raise the landing platform. Keep your blue portal in the same place, and then drop back down into the pit again so that you fling across the room and land on the raised platform, from there you can head straight into the elevator to reach the next chamber.



07

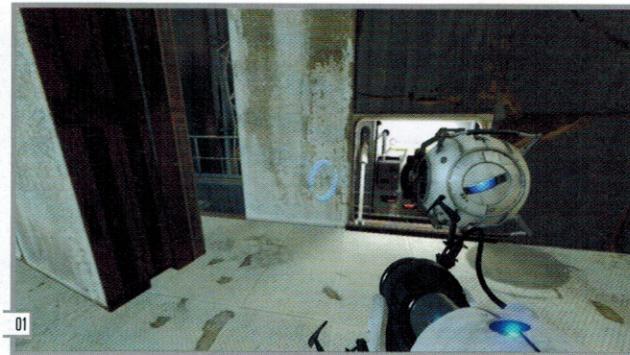
Emergency Test Chamber 07

08/10

01 Test chamber 07 is in ruin because of the restructuring of the testing facility due to the current crisis, but thankfully, Wheatley has found his way back to you and can offer some assistance. An orange portal can be seen on a section of wall that is lying on the ground and as Wheatley suggests, place a blue portal on the wall that can be seen in the distance behind him. Step through the orange portal on the floor so that you drop down into the room on the other side of the debris where Wheatley is waiting.

02 After a brief conversation, Wheatley will detach himself from the management rail and you will need to pick him up off the floor. Once Wheatley has been secured, a small panel in the wall will open up revealing a terminal that Wheatley can interface with. Carry Wheatley over to the terminal and he will automatically attach himself to it, he will, however, need some privacy to carry out his plan so you will need to turn away from him for a few seconds. [→□ 01]

03 Wheatley managed to open up a secret panel in the wall while you weren't looking, so after he detaches himself from the interface, pick up him and head through the door. You cannot drop



Wheatley normally, or place portals while you are carrying him so he will be with you until you find another interface. Follow the maintenance catwalks on the other side of the door to come to another door, and then follow the long series of catwalks past the transportation tubes to a second set of doors to move to the next area.

C1

GLaDOS' Chamber

09/10

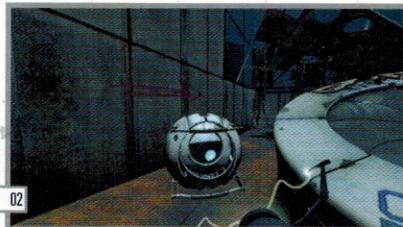
01 Once you are through the doors, continue walking along the corridor and then cross the partially ruined sky bridge on the right when you come to it. Go through the door on the other side of the sky bridge to enter a large room that was once home to GLaDOS. As you walk up to GLaDOS, Wheatley will begin giving you a history lesson on the events leading up to its destruction; follow the path around to the right of GLaDOS and start heading towards the back of the room.

02 The arrows on the wall near the back of the main room point you towards a small alcove at the back, in which there is a staircase leading down [→□ 02]. Follow the stairs down for a short distance until you come to the end of the catwalk and then jump off the end to reach the area below.

03 Head into the small room and then follow the corridor on the other side until

you come out onto another series of catwalks, and then walk along them until you come to the main breaker room at the end. Wheatley will start looking around for the switch that controls the escape pods but he will be unable to locate it. When prompted, plug Wheatley into the interface so that he can turn the lights on, unfortunately, he also triggers the platform you are standing on to begin moving upwards, activating all of the breaker switches as it rises.

04 The platform will eventually bring you back up to the room containing the wreckage of GLaDOS, but all of the switches that were triggered on the way up have triggered the power up sequence to restart GLaDOS, and she is not happy [→□ 03]. Two claws will descend from the roof of the room and pick up both you and Wheatley, and after tossing Wheatley aside, GLaDOS will drop you down into the incinerator.



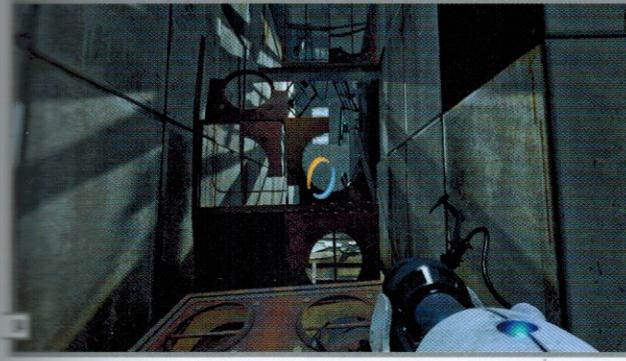
07_010

C2

The Incinerator Room



07_012



01 It is a long drop down into the Incinerator Room, but once you are back on solid ground you will need to look for a way out. The twisted metal supports on the right form a series of bridges that you can walk along to reach the opposite side of the room and then drop down through the hole at the end. From this small ledge, you can see another room ahead that you can walk into, at the end of which is the Dual Portal Device.

There is debris piled up on top of the device so wait for GLaDOS to clear it out of the way and then pick it up. The way out of this room is along a raised corridor that is currently blocked off by a destroyed wall, meaning that you will need to use portals in order to escape. Place a blue portal on one of the side walls in the room you are in and then place an orange portal on one of the walls further along the corridor on the other side of the wall so that you can step through the portal to reach the next corridor.



Aperture Information Service

It is possible to speed up the process of making your way down this long series of corridors by using the Portal Peeking technique. If you place the exit portal on the wall at the end of each section of the corridor you can peek through the portals to see down the next section of the corridor, allowing you to get your next portal in place. Then you just need to keep moving between portals quickly so that you do not fall down. This method can take some practice, but when mastered will significantly improve your time through the area.

02 After walking down this first section of corridor for a short distance, you will find that the way ahead is again blocked and you will need to use portals to get around the obstacle [→□ 04]. Place a blue portal on the wall on this side of the blockage and then place an orange portal on any of the walls on the other side. Once the second portal is in place, step through it and continue along the corridor.

03 At the end of the corridor, the stairs that would normally allow you to advance have been destroyed, but thankfully, GLaDOS is online and can provide some assistance. Wait for GLaDOS to move a portalable section of wall into view in the room to the left and then place a portal on to it. Place your second portal on one of the walls in the corridor so that you can then step through it to reach the small room.

04 From this small room you will need to drop down into the next corridor on the other side and then follow that along until you round the corner. A light will flicker on as you move around the corner, illuminating a small alcove above the corridor to the right [→□ 05]. Place a portal onto one of the walls in the alcove, and then place another in the corridor so that you can step through it to reach the alcove.

05 From the alcove you will be able to see into a room on the other side of the corridor with has a portalable wall on the back of it. Reposition your portal from the corridor to the wall at the back of the room ahead, and then step back through the portal in the alcove to reach the room.

06 There is a corridor leading out of the room on the left-hand side as you look back to the alcove which is the only way out. Follow this corridor along and wait for GLaDOS to move the broken panels out of the way so that you can go through door and into the elevator to complete the chapter.

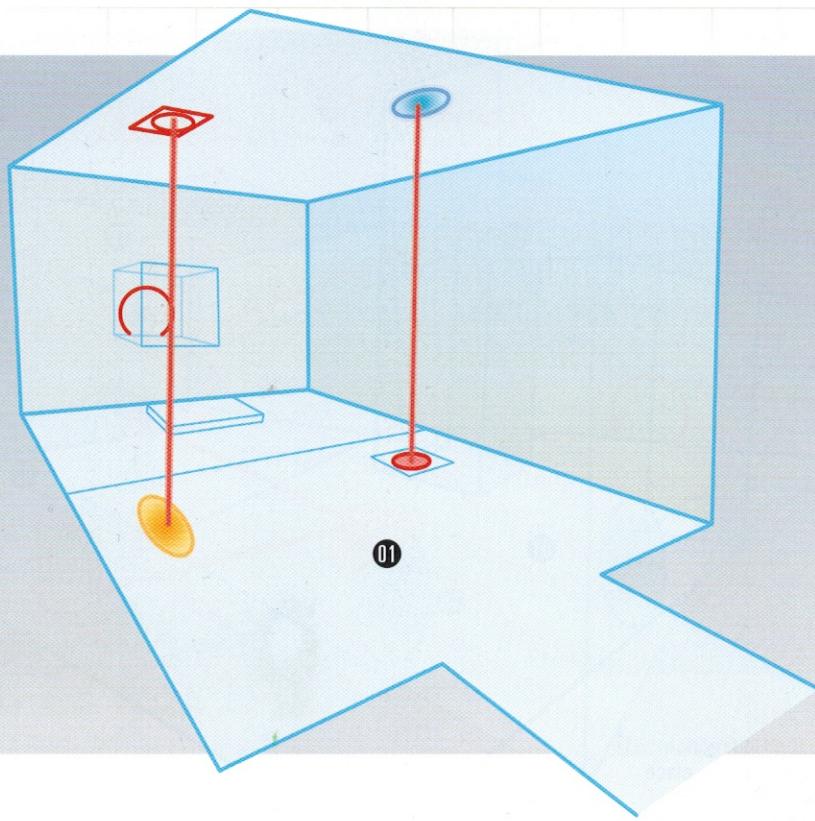
01

GLaDOS Test Chamber 01

This Test Chamber introduces you to Thermal Discouragement Beams, and while these beams may not kill you instantly, the accumulative damage of successive hits can soon build up to lethal amounts. The aim of this test is to get the beam into the receptacle so that the platform in front of the exit rises. The only means you have of accomplishing this is by redirecting the beam using portals.



07_013

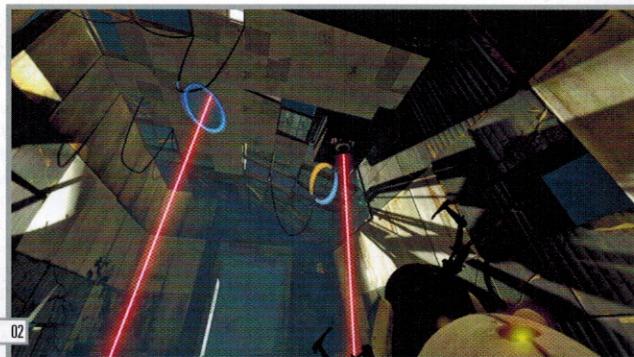
APERTURE
LABORATORIES

When you first enter this Test Chamber, it will still be in disarray and you will have to wait a few moments while GLaDOS moves the test elements into their correct positions. The beam is firing down onto a portalable surface, so place your blue portal directly underneath it [→□ 01].

The platform will begin to rise as soon as the beam hits the receptacle, so you will need to be standing on it before you create the next portal.

Step onto the platform and then look directly above the beam receptacle and

try to locate the faint orange glow that it is emitting onto the ceiling. Placing your orange portal directly onto the orange glow will ensure that the beams will line up and cause the platform to rise [→□ 02]. Once it is as high as it can go, step off it and go through the exit and into the elevator.



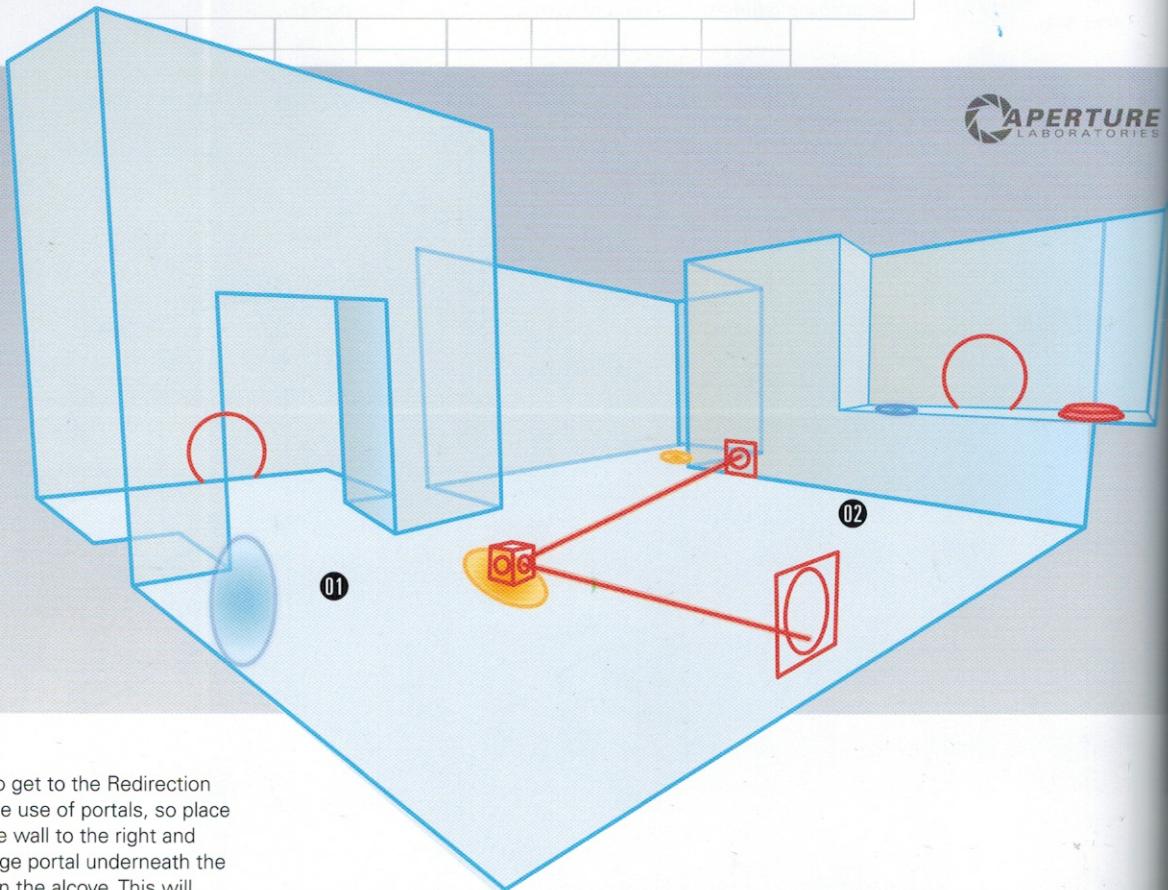
02

GLaDOS Test Chamber 02

In this chamber you will be introduced to the Discouragement Redirection Cubes which can be used to reflect beams along almost any horizontal angle. To solve this test you will need acquire the Redirection Cube, and then use it in conjunction with the beam to activate the staircase before placing it onto the button to open the exit.



07_014

APERTURE
LABORATORIES

01 The only way to get to the Redirection Cube is through the use of portals, so place a blue portal on the wall to the right and then place an orange portal underneath the Redirection Cube in the alcove. This will cause the Redirection Cube to fall through the portals onto the floor near your blue portal, saving you the need to enter the alcove. Pick up the Redirection Cube and walk forward into the beam with it so that the beam starts getting reflected [→□ 01]. Angle the Redirection Cube so that the beam is being reflected into the receptacle and then drop the cube on the floor.

02 Jump over the beam and then walk up the stairs so that you are standing near the door. In order to keep the exit door open you will need to have the nearby button depressed, which will require the use of a cube. Place a blue portal on the floor of the ledge you are on and then place an orange one underneath the Redirection Cube so that it falls through them. Pick up the cube after it passes through the portals and then place it onto the button to power the exit door so that you can reach the elevator to the next Test Chamber.

**Aperture Information Service**

After retrieving the Redirection Cube as usual, it is possible to save some time when completing this test through the clever use of portals. Instead of using the Redirection Cube to reflect the beam into the receptacle, place your orange portal above the blue one that you have on the wall to the right.

Step through the blue portal so that you can see out of the orange one and you should be high enough to see the floor of the ledge near the exit [→□ 02]. Reposition your orange portal so that it is on the floor near the exit, and then pick up the Redirection Cube and step through your blue portal to quickly reach the ledge, from there you can complete the chamber as usual. Using this method bypasses the need to reflect the beam and allows you to get straight to the exit quickly.



03

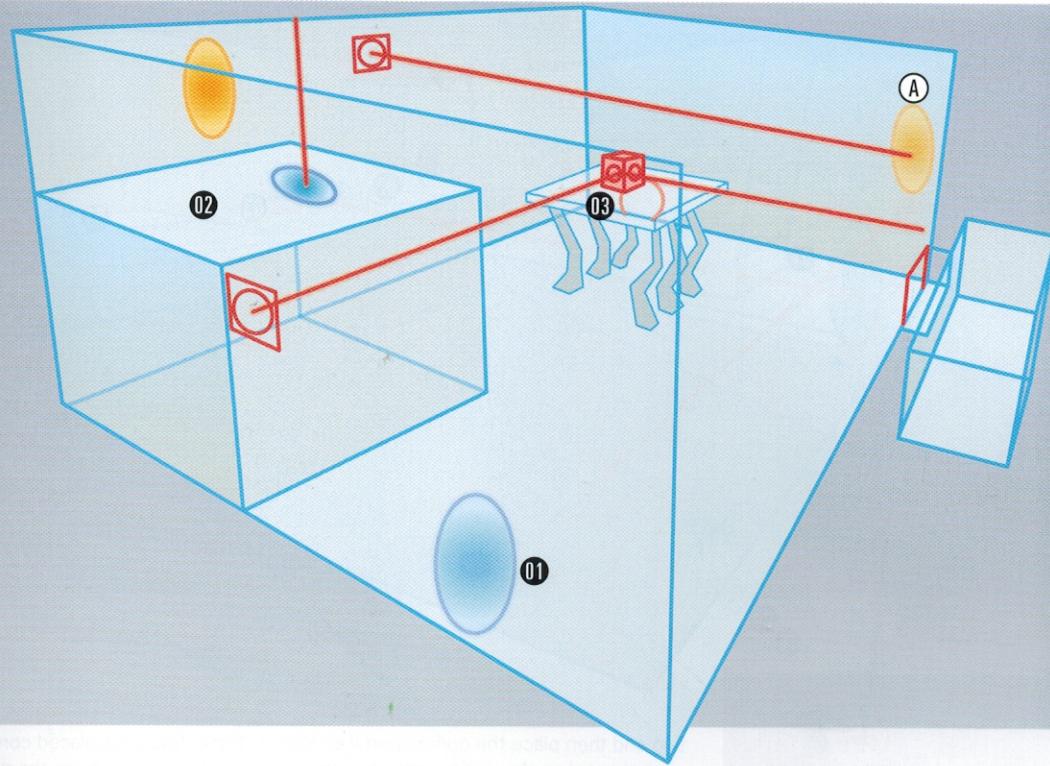
GLaDOS Test Chamber 03

The two beams in this chamber need to hit each of the receptacles simultaneously to open the exit. Since there is only one Redirection Cube, you will need to make additional use of portals to accomplish this task and complete the test.



07_015

TURE

APERTURE
LABORATORIES

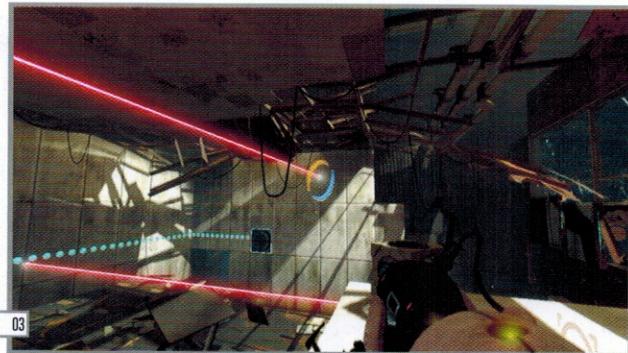
There is a small portalable surface on the wall to the left as you enter and you should place the blue portal on it. The orange portal should then be placed on any of the surfaces around the platform with the Redirection Cube on, so that you can walk through them to reach that area.

The receptacle for one of the beams is on the ceiling directly above this platform, so you will need to redirect one of the beams upwards into it. Look for the orange glow on the ground so that you know the exact position of the receptacle and then place a blue portal directly onto it. Your orange portal should be placed at Position A, just where the upper of the two lasers is hitting the wall [HOT]. If the portals were correctly positioned, the beam should now be firing directly into the receptacle on the ceiling.

Because portals were used to redirect the first beam you are free to use the Redirection Cube on the second beam. Pick up the Redirection Cube and then jump from the platform you are on, down to the platform slightly lower down. When you are on this platform, place the Redirection Cube into the beam and angle it so that the beam is being reflected into the receptacle before dropping the Redirection Cube in place. The exit should now be open so you can head through it and into the elevator.

**Aperture Information Service**

A room belonging to the shadowy figure known as Rat Man can be found in this chamber, and if you wish to know how to find it, please refer to the Enrichment Completion Area Chapter.



04

04/08

GLaDOS Test Chamber 04

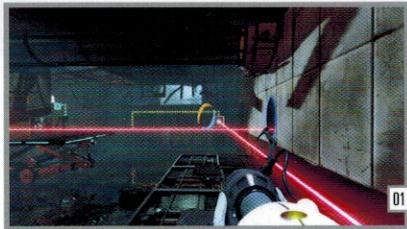
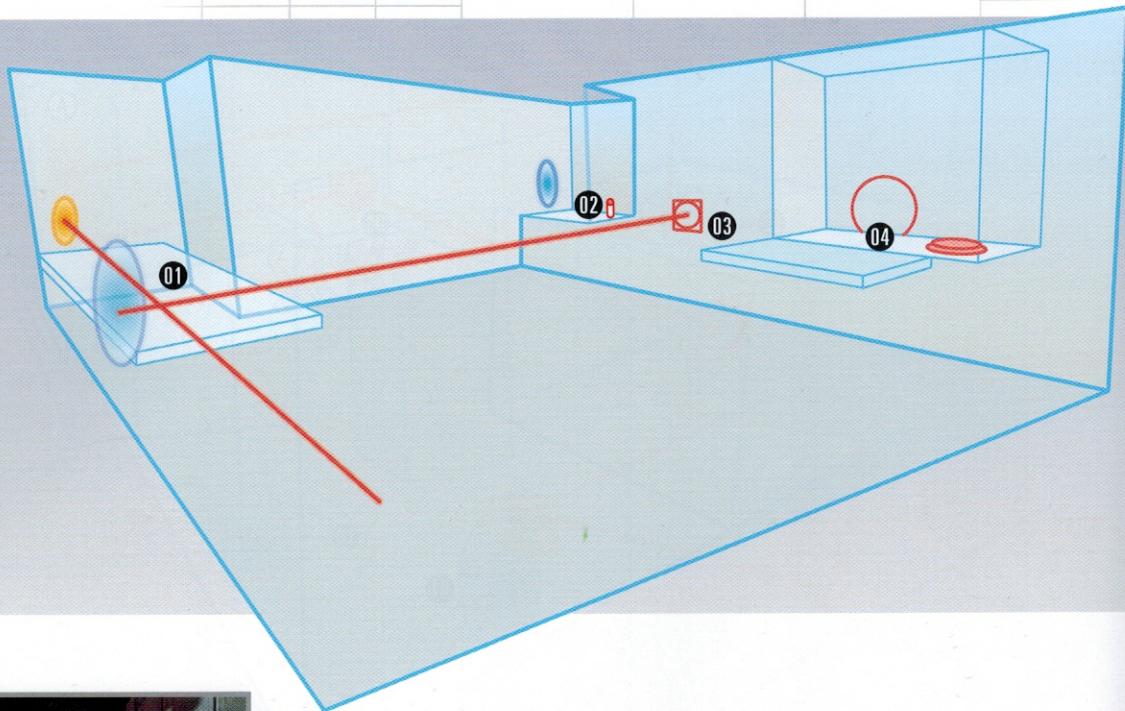
To complete this test you will need to find a way of getting the cube from the alcove onto the button near the exit. To accomplish this you will need to use portals in conjunction with the beam to control the platform above the moat and move it between the two locations.



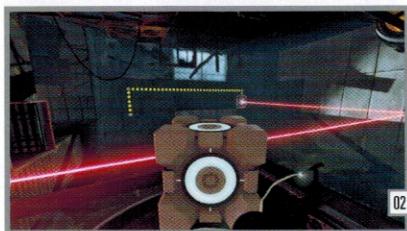
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ting and then place the orange portal on the central panel on the wall to the left of the entrance.

If the portals were positioned correctly, the beam should now be hitting the receptacle and the platform will start to move [→ 01]. Once the platform is in line with the alcove, reposition the blue portal onto one of the walls in the alcove so that the beam no longer hits the receptacle, stopping the platform.

01 The entrance to this chamber is still blocked off when you first reach the area so you will need to wait for GLaDOS to clear the path for you. To begin with, you will need to move the platform from its current position near the exit, over to the alcove with the Cube Dispenser so that you are able to step onto it. Place a blue portal on the surface that is currently hit-

02 Step through the orange portal on the wall so that you come out in the alcove and then press the switch so that a cube drops down out of the dispenser. Pick up the cube, and then walk onto the platform with it and drop it in the center of the platform. While standing on the platform, put the blue portal back onto the wall that the beam is hitting so that the platform starts moving again.

03 Make sure you are standing at the back of the platform as it moves towards the exit and that the cube is ahead of your position.

If the cube was placed correctly, it should block the beam once the platform starts to pass by it allowing you to walk around the side of the cube and safely avoid the beam [→ 02]. Once you are on the other side of the beam, simply pick up the cube and move it out of the way so that the beam can resume hitting the receptacle and the platform will start moving again.

04 Once the platform is in line with the exit, walk off it and onto the ledge and then place the cube onto the button so that the exit door opens and you can continue on to the elevator.



Aperture Information Service

If you are confident in your jumping abilities, you can continue to hold the cube after making the platform move and then simply jump over the beam when you come to it. This method is slightly quicker than using the cube to block the beam, but if you mistime the jump, you may end up being falling to your death in the moat.

01 The entrance to this chamber is still blocked off when you first reach the area so you will need to wait for GLaDOS to clear the path for you. To begin with, you will need to move the platform from its current position near the exit, over to the alcove with the Cube Dispenser so that you are able to step onto it. Place a blue portal on the surface that is currently hit-

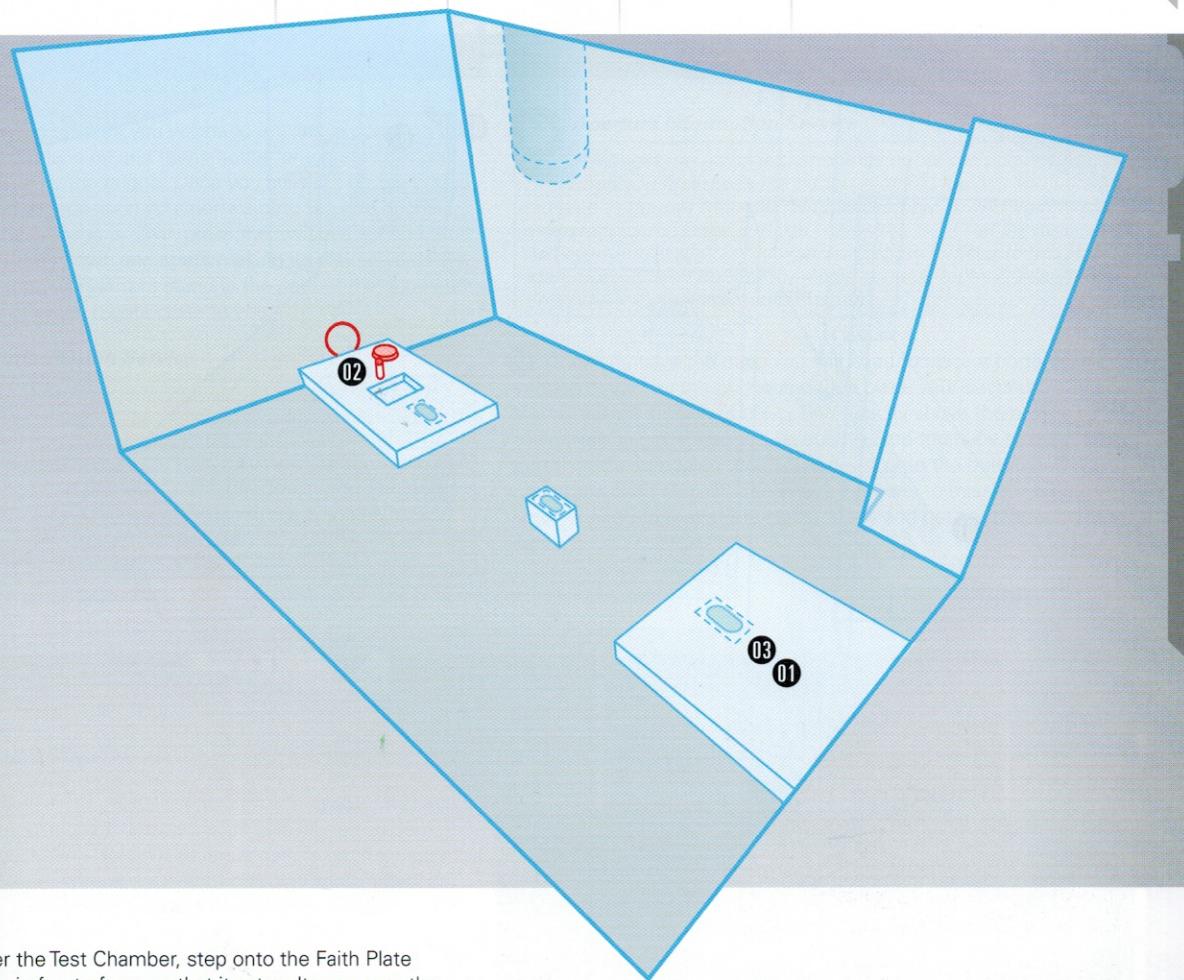
05



07_017

GLaDOS Test Chamber 05

This chamber introduces the Aerial Faith Plate, which is a device used to catapult players or objects over large distances. The goal of this test is to get a cube from the dispenser and place it onto the button near the exit. To accomplish this you will need to make use of both Faith Plates - and some precise timing.



When you enter the Test Chamber, step onto the Faith Plate on the floor directly in front of you so that it catapults you over the moat to the other side of the chamber.

Underneath the Cube Dispenser there is another Faith Plate, so if you press the switch to activate the dispenser, the cube will simply start bouncing up and down in place. Timing is the most important factor during this phase of the test, since you will need to catch the bouncing cube in mid-air while you are being catapulted across the room. Step onto the Faith Plate just as the cube is hitting the Faith Plate it is bouncing on, so that it starts rising as you advance towards its position; if timed correctly, you should easily meet the cube in mid flight and grab it automatically [→ 03]. If you miss grabbing the cube, or knock it into the moat you can simply press the switch to cause a fresh cube to drop down and try again.

Once you have the cube, step onto the Faith Plate near the entrance again so that you get catapulted back over to the exit area, and then you can drop the cube onto the button and walk down to the elevator.



06

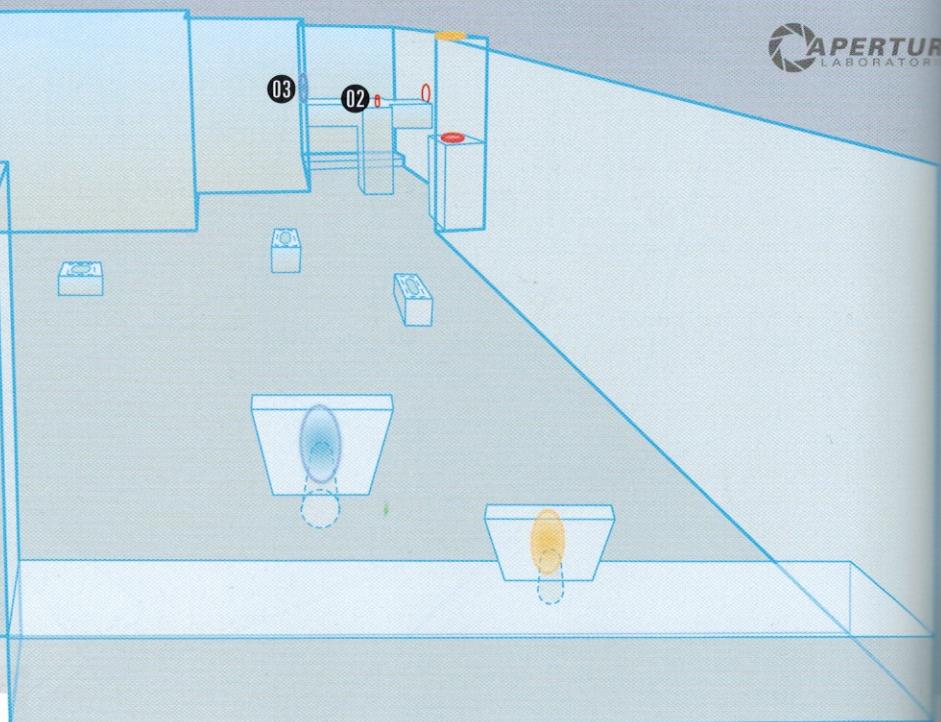
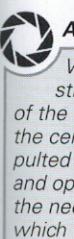
06/08

GLaDOS Test Chamber 06

The goal of this test is to get a cube from the dispenser above the first Faith Plate, over to the button near the exit on the other side of the moat. The Faith Plates will only take you to a small ledge initially, so you will need to create a fling in order to continue on to the exit.



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- 01** Walk all the way to the left of the ledge near the entrance so that you can clearly see both of the angled surfaces; place one portal onto each of them. Now when you step onto the first Faith Plate and start catapulting over the moat you will eventually land in one of your portals and fling out of the other one onto another Faith Plate, which will take you to the bridge near the exit. [→□ 01]

While you are being catapulted by the Faith Plates you can still move the camera so adjust your view towards the angled surfaces

to make sure you land in your portal. If you happen to end up on the ledge with the angled surfaces, you will need to create a portal on the lower of the two and then place another one on the wall near the entrance so that you can begin again.



Aperture Information Service

You can save a small amount of time in this chamber by only placing a portal on the lower of the two angled surfaces. This surface comes into view much sooner as you move along the ledge, so you are able to get back to the Faith Plate quicker and start the catapulting. While you are in mid-flight on the way towards the angled surfaces, you will need to place your second portal onto the upper angled surface to create the fling and continue as normal. For an even more advanced technique, you can try placing portals onto both angled surfaces while you are in mid-flight. This is of course much more difficult, but will save you even more time.

- 02** Once you land on the bridge near the exit, press the switch to activate the Cube Dispenser; instead of a cube, however, a load of garbage will drop out of it because GLaDOS is still in the process of fixing the chambers. The garbage will follow along the same series of Faith Plates and use the same fling that you used to reach the bridge; make sure that you are not standing in its way when it flies over the bridge since it can easily knock you off.



If you do get knocked off then you will need to place a portal on the wall of the ledge you land on and then another one on the section of portalable wall up by the bridge. Once you are back on the bridge you will then need to reposition your portals onto the two angled surfaces. Once the garbage is clear, press the switch a second time so that the cube drops down and starts making its way towards the bridge. This time, you will want to stand in the path of the cube and catch it in mid-flight when it gets close to you. [→□ 02]



Aperture Information Service

While the cube is in mid-flight, you can actually redirect it straight onto the button, by placing one portal on the higher of the two angled surfaces, and then placing the other portal on the ceiling directly above the button. Now when the cube is catapulted into the first portal, it will fly straight down onto the button and open the exit. Using this advanced method, you can bypass the need to catch the cube and drop it through another portal, which will cut down on your time in this chamber.



Aperture Information Service

Amongst the garbage that comes out of the dispenser when you first press the button is an old radio; if you take the radio up to the Rat Man room in this chamber it will begin to play a mysterious message and you will unlock the Final Transmission Achievement/Trophy. For full details on how to get into this Rat Man room, please refer to the Achievement/Trophy Guide in the Enrichment Completion Area Chapter.

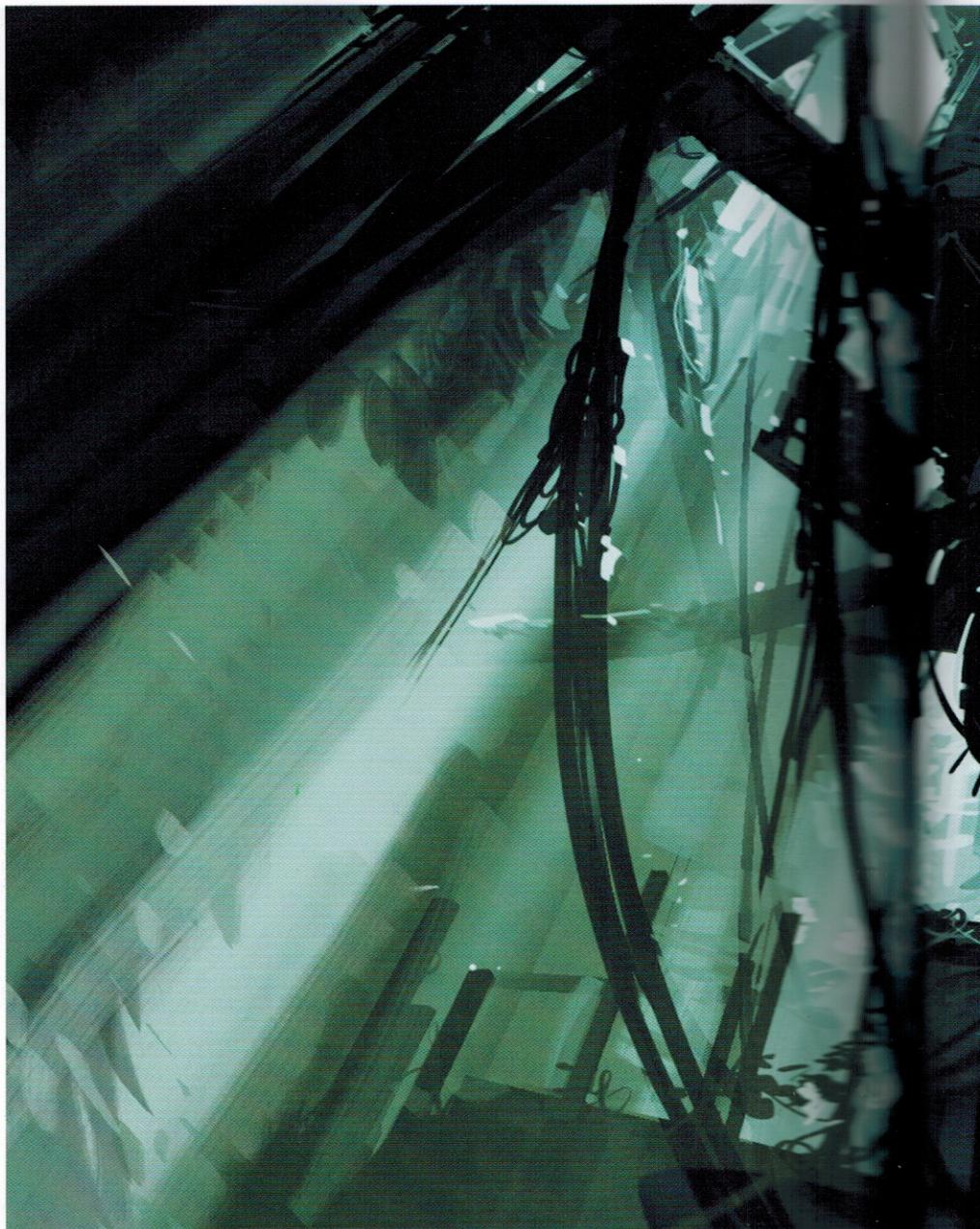


Once you have the cube you will need to place a portal on the section of wall by the bridge and then place your second portal on the portalable section of the ceiling directly above the button. With the portals in place, you will be able to drop the cube through the portal on the bridge so that it falls down onto the button below and opens the exit [→□ 03]. If the cube happens to miss the button, you will need to repeat the earlier steps and get another cube to try again.



Garret Ricky

Level Designer



When did Valve start development on Portal 2?

GR I'd call it three years ago right? Right after the experiments?

JG Yeah we got together a small group of people, there were six of us maybe.

What are the experiments?

GR Gameplay prototyping. Just concept experimentation.

What was the catalyst for that?

GR Portal was really successful. It was clear people wanted more of it. As soon as the orange box was out the door we were watching the way people were enjoying Portal and knew we had to make another one.

JG I don't think with the first game there were any plans for a sequel, but there was a lot of potential content for a much bigger game. There were a lot of good ideas that didn't make it into the original, so we just had to go do that. This didn't mean making

harder puzzles or adding more fling puzzles, or just adding more objects and mechanics that didn't make it in and that we wanted to explore.

What kind of gamer to you want to enjoy Portal 2?

GR We want to keep the original audience, but at the same time this is a game where we can expand the audience. It doesn't take a lot of twitch skill. You can get all sorts of gamers into Portal. We have a lot of anecdotal stories of people who work here or even just friends of people who work here playing through Portal with their girlfriend or some other person in their life, like

their parent or someone else who wouldn't usually play games. It's all anecdotal, but it certainly makes us think we can expand the audience with Portal 2.

Where do the action elements like timing puzzles and turrets fit into that philosophy?

JG I think we scaled back a lot on timing and twitch gameplay.

GR Yeah, we do want to grow the audience and we don't want to make it impossible. We don't want you to know how to solve a puzzle but not be physically able to do it. I don't think we've met anyone who thinks that's fun.



JG Yeah that was a good way to get a puzzle cut. That was the worst, when they knew what they needed to do, but they just couldn't for whatever reason.

Which comes first, the story or puzzles?

GR They don't constrain each other. I think they build off of each other. We'll make a puzzle, and it's not like 'This isn't fun let's cut it' we're thinking more in terms of what we can add. A lot of the puzzles were drawn up very differently from how they shipped. Sometimes it's because the story informed it. Maybe we have the opportunity for Wheatley to do this little scene that makes the level better.

JG A lot of the puzzle design would also inform the training for puzzles. If we built something really difficult that included elements some people weren't familiar with, we'd have to decompose it and find the path that the player would need to succeed in the puzzle. Then it was just a matter of going in and getting the pacing correct. Pieces go in, pieces come out, and what's left is the game you have now.

How did the large number of story sequences end up affecting the pacing?

JG What do you think? Did we insert these story segments where there was a huge track of puzzles and we thought people needed a break?

**John
Guthrie**

Level Designer



GR Yeah, I think it was an easy thing to weave in. It was also a function of team size. You know, we had the people to add in those interesting art vistas for this big story firepower. Portal 1 probably could have used that. If there were segments where you could decompress you'd probably be better off. So we had enough people to do it, and it was a good thing to add to the game.

What were some upgrades to the engine made for Portal 2?

GR The paint required an overhaul to get that to work. It's a whole new system. There's lots of optimizations to run on all the different platforms we're on. Students at Digipen made a game called Paint and it used three different types of paint. You'd cover the wall in it and solve puzzles. It was very Portal-like. We played around with having portals and paint in the same room early on, so implementing that in source was a new feature for Portal 2.

JG So the four guys that worked on the paint game work at Valve, they did a lot of that work. Then they went on to become full developers and just build levels.

How do you balance skilled vs unskilled players?

JG The new objects go a long way in putting all players on the same playing field. We don't want to build the game to pick up where the previous game left off. We don't want you to have to come in knowing how to do these infinite flings. So there's the new objects. Some people pick it up faster than others, but generally everybody is going to have fun exploring these new mechanics.

Is the level editor you're releasing the same thing you guys were using to build levels?

JG Yeah it's the same thing. Hammer keeps evolving. We release an SDK to the public, but we keep improving it internally while we're working on a project, so when we ship we throw it over the fence and let everyone go for it. We'll also do that with this product.

GR The scripting is a new feature.

JG Oh, that was in Left 4 Dead.

GR Yeah that was in Left 4 Dead. A lot of the dialogue is much more interesting and dynamic now that we've done a lot of it



in script. So you'll find that Wheatley and GLaDOS have odd little reactions to quirk cases, and we can build that really quickly.

JG Scripting is a programming language for level designers that doesn't need compiling. You just run it and the game handles that at runtime. I expect there's a lot of fun things level designers will be able to do.

The decisions the characters make when they talk was determined through scripts. All the game logic of determining who talks

was driven through these text files rather than something in the map.

Buttons were originally written in C code, but we made a version that worked in script. So level designers could take models that are already in the game and find ways to imbue them with properties using scripts. Previously you had to have dev studio, and know how to compile DLLs and write C code to do that.

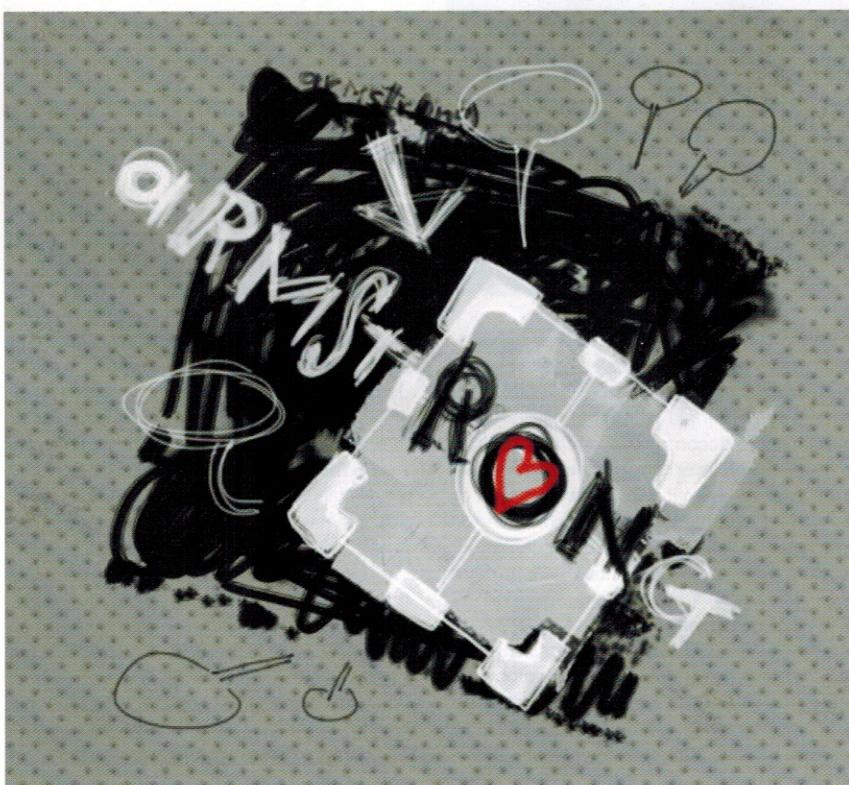
Did the design aesthetic of the old chambers affect the way you designed the levels?

JG I know a lot of those designs were originally built just like the first levels. Later there were opportunities. You're inside this giant sphere now, so we could change the fling distances or ways you navigate through. Those things were taken advantage of, but they were built just like all the other levels.

GR The puzzles created were just agnostic to where they would be in the game and what time period they were in. The story just helped inform us. I mean, it was created in the 50s so that gave us this excuse to do these catwalk traversals and all these vistas you could build now around and in between these puzzles. But the puzzles were just what we designed.

How do playtesters affect your job in designing levels?

GR They almost are the designers! We're just barely filtering the information as it comes back to us. It's all about what the customer likes. We never give them hints. You're just observing them. You want to see how it breaks, because it will break. The next puzzle you make won't make the





same mistake. It's education. It makes you a better level designer. Watch 100 playtests of Portal, and you'll be able to design a level. Come into it thinking you can design a level without watching playtesters play it, or having played it yourself, you're going to make mistakes.

JG We have a system which records all the sessions, and there's all this data it collects. How long it took them to complete the chamber, when they die etc.

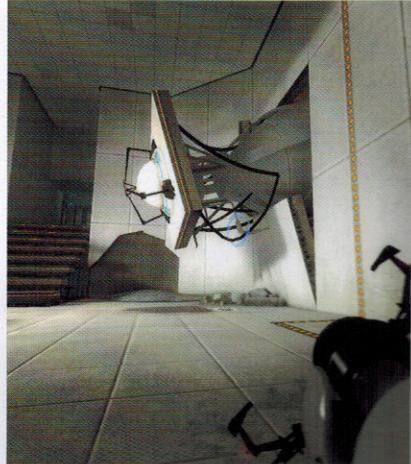
GR You have to watch that though. You can't tell if that's a fair death or an unfair death just by the stat, you have to watch them play. We have a really cool high-tech eye tracker that marks where the user is looking.

JG You learn a lot about watching people play off different skill levels. Someone who has never touched the controls or the game is going to teach you something different than an expert.

How was the Ping Tool born?

JG I know exactly how that came about! "Over there! No over there!" conversations. They had no way to indicate over there, so they'd just shoot their portal and their portal would be making the gesture, so it was natural to add this tool to let them ping the world. How long did we play before we added that feature?

GR Two tests?





Any elements that didn't make it in?

JG We had different paint types that didn't ship. There was sticky paint. The original paint game had sticky paint. It's like a glue. Cubes would stick to walls and that sort of thing. It was a fun experiment.

GR It kind of worked, but it wasn't worth finishing.

Who at Valve is the best at Portal?

GR I'd say Tejeev. With his speedruns.

JG He did all the achievement testing, and there were couple that required you to beat it really fast. He probably has the most skill at this point. Yeah, the guy who got the test the achievements job became the expert!





If you guys were Cave Johnson, what would you have the lab boys invent?

JG A combustible lemon! That's a great question.

GR Portal 3, so I don't have to!

Who would win in a fight, Chell or Alyx?

JG If Chell had the portal gun it would depend on where Alyx was standing. If it was just fists, I'd put my money on Alyx.

GR I want to find out. Let's see this exercised.

If you could place two portals in real life, where would you put them?

JG It'd be my wall and Hawaii! Or the kitchen. Right next to the coffee machine. If I could shortcut my walk to the coffee machine in our kitchen I'd do that.

GR I'd gain 20 pounds from not walking!

