

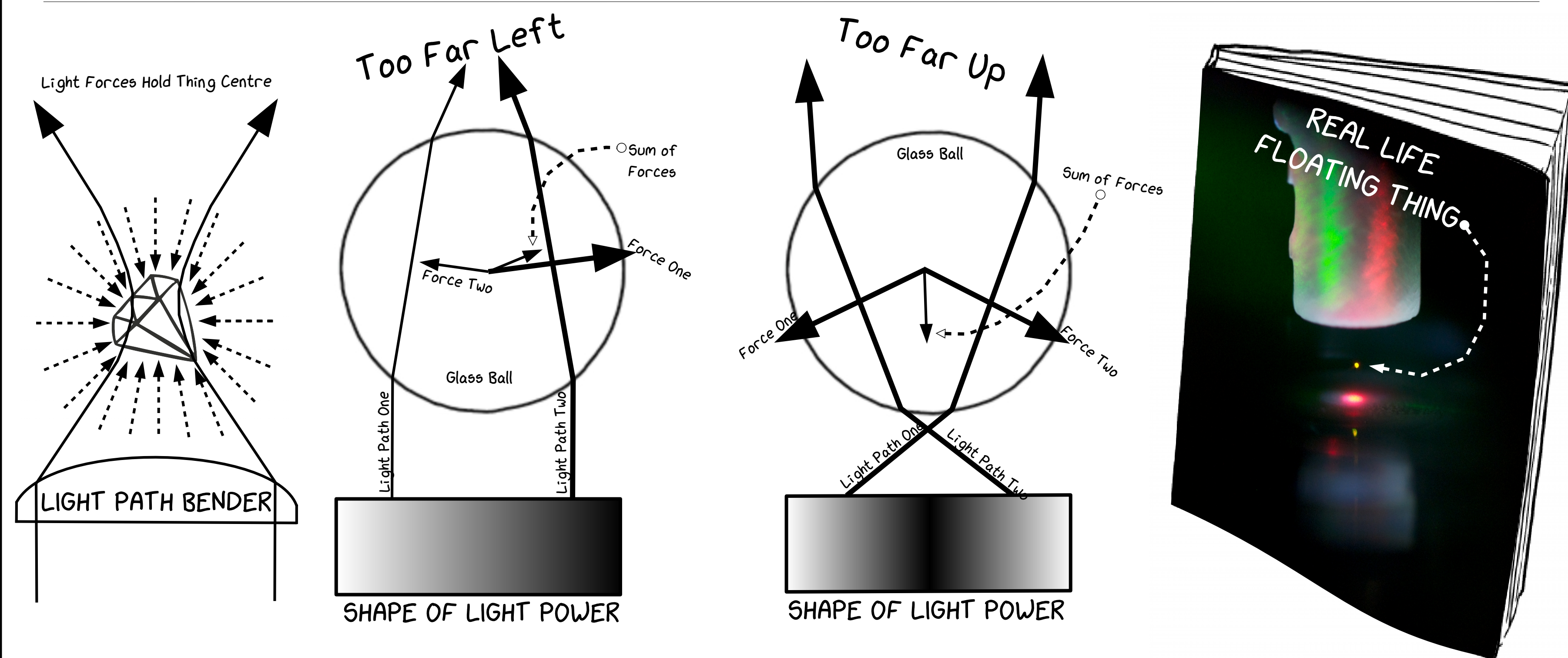
Holding Things In Air Using Light!

(We Take The Air Away Too)

(EXPLAINED USING ONLY THE TEN HUNDRED WORDS PEOPLE USE THE MOST OFTEN)

REECE ROBERTS, MATT VAN BREUGEL, HOLDING TINY BRIGHT ROCKS IN AIR ROOM, MACQUARIE LEARNING PLACE

HOW DO WE HOLD THINGS WITH LIGHT?



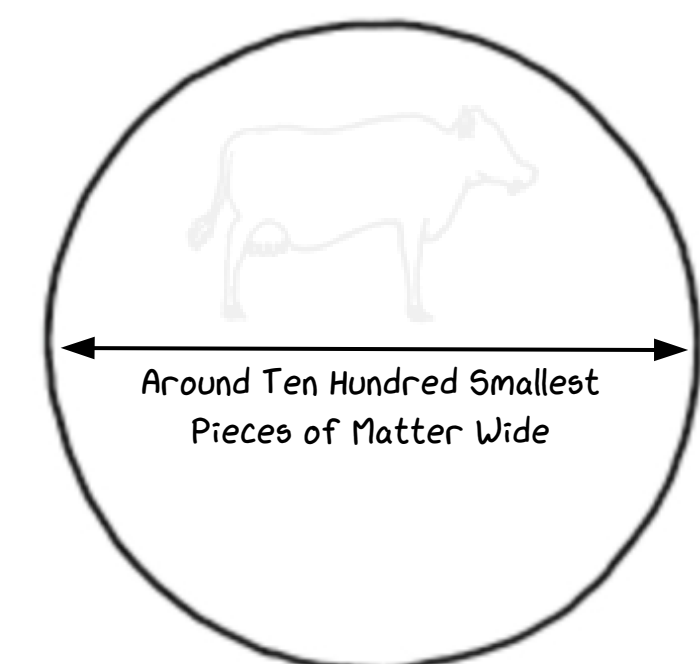
You can not create or wipe out the power of anything, only give its power from one thing to another. As light changes direction there is a change in power of the light and so then it must give some of this power and turn it into a pushing force on what it hits. If we follow the light paths in the pictures above as it hits the glass ball we can see that in some special cases, the light hits the glass ball in such a way that it can be held and pushed to one spot in the middle of the air.

Once it is held there it will only be talking to the light field and the air around it. In fact, we can then use a special box that can pull out all of the air from around glass ball and leave it touching nothing: like its in outer space. Now, the glass ball is only talking to the light field and nothing else at all. Since we can control the light field very well with our special straight paths of cat-like light, we can control the way the thing moves very well.

We no longer count the way the thing moves using hot or cold, but we actually count the single shakes that the thing has. Like light can be thought of as being made up of single pieces, the way the glass ball moves can be made up of single shakes too. It may sound crazy but when we control the light really really well we can actually hold the thing really really still and then count the number of single shakes that are happening to the glass ball.

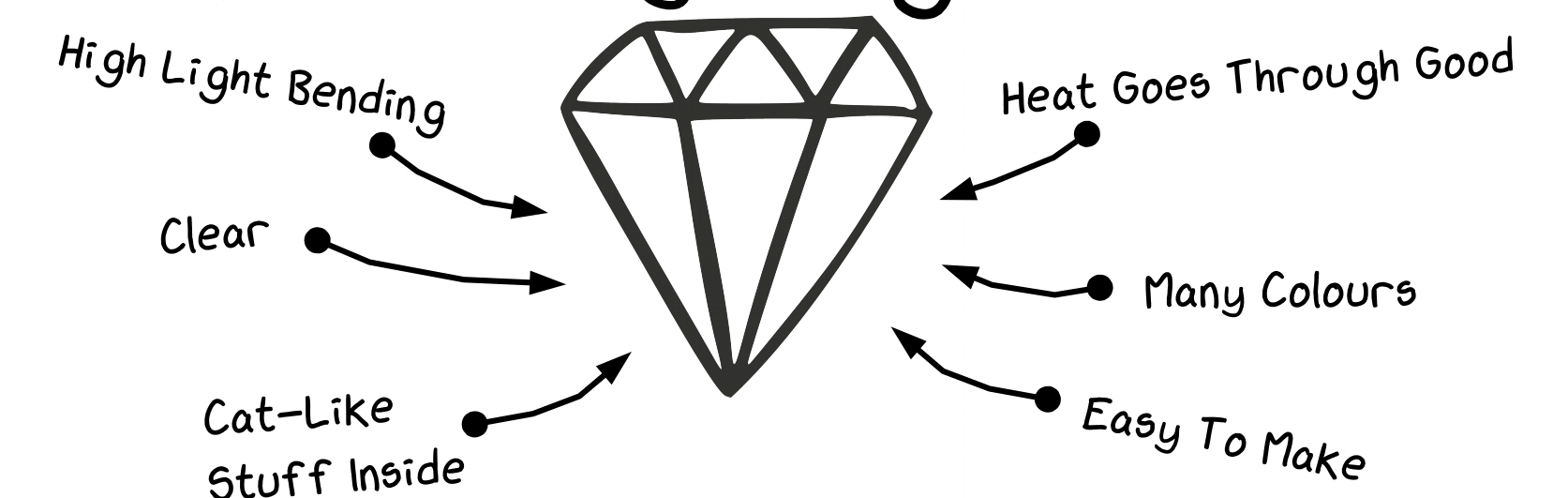
WHAT THINGS DO WE HOLD WITH LIGHT?

TINY GLASS BALLS



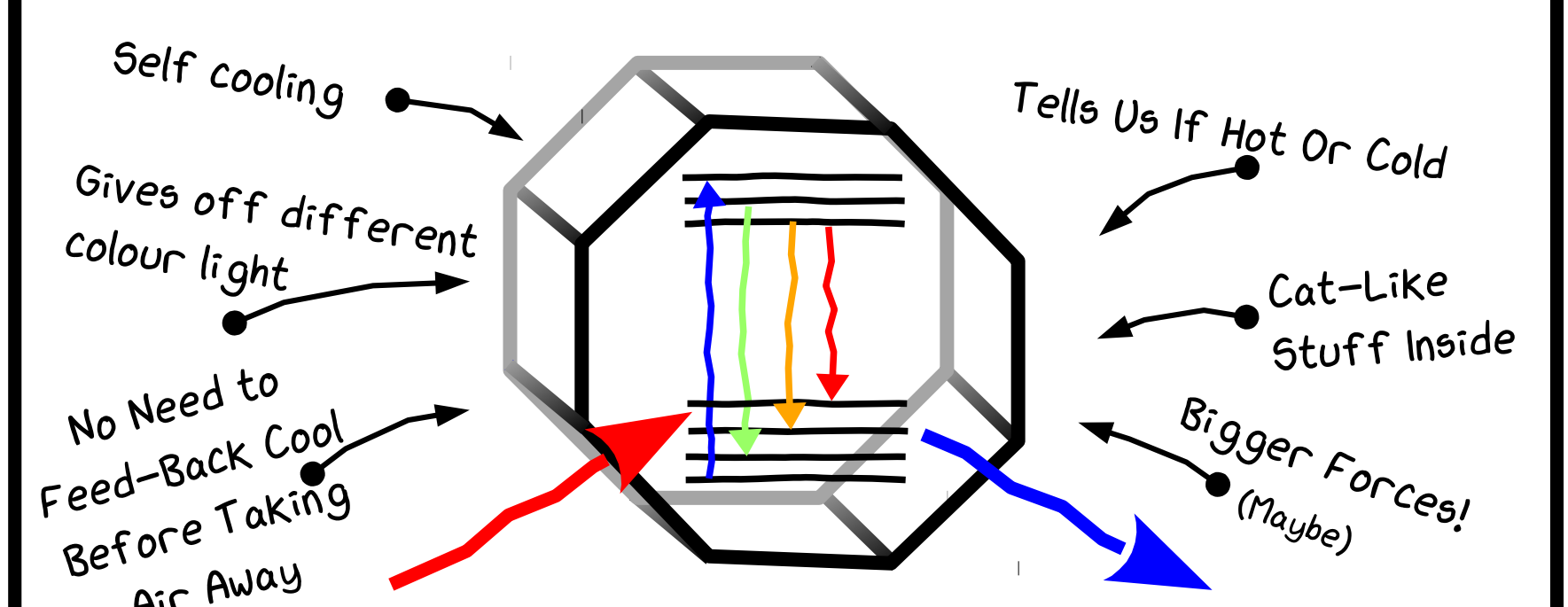
This is the closest thing you will find to a round ball in outer space

WEDDING RING STONES (AKA: Tiny Bright Rocks)



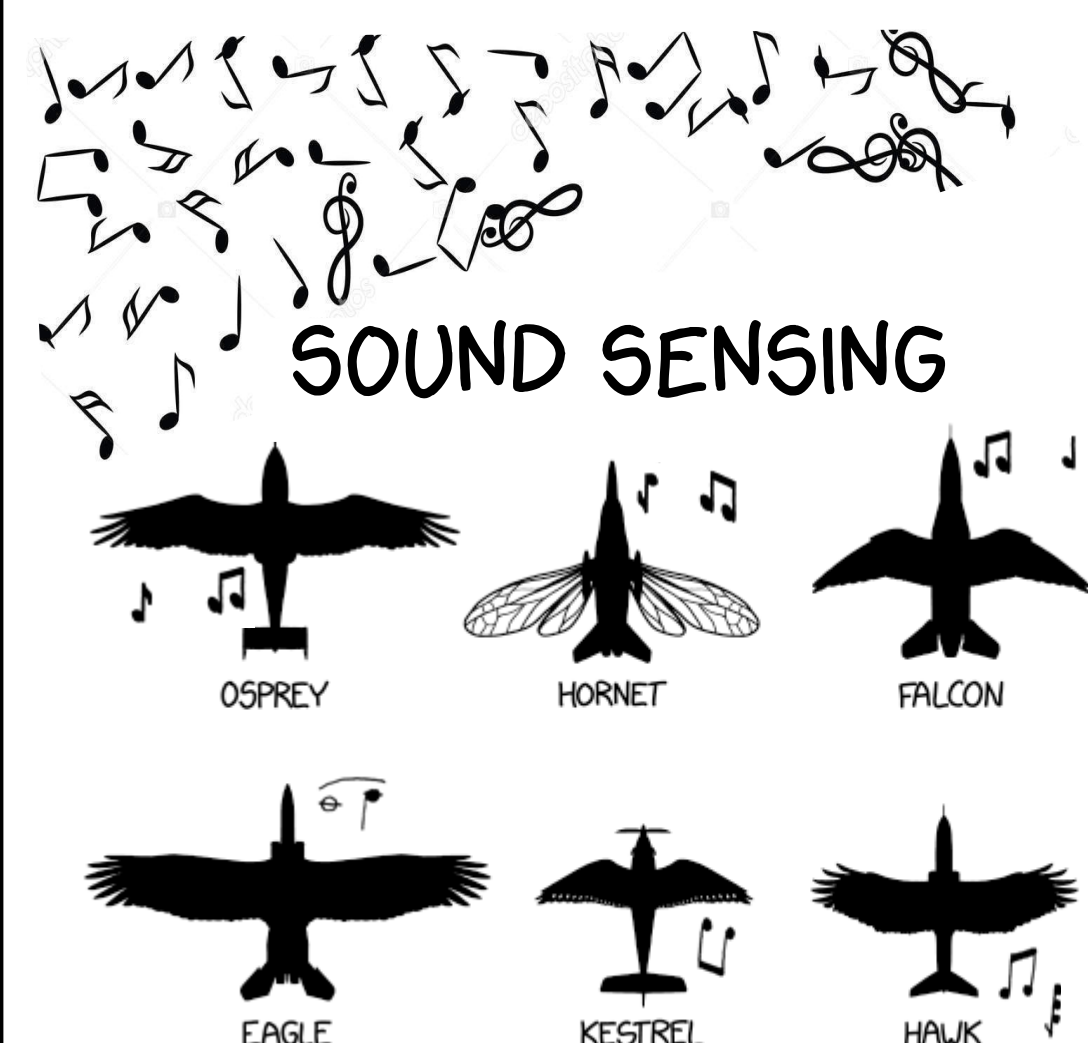
We hold wedding ring stones in air because they offer us extra ways to look at what is happening inside the thing while it is being held up in space. It can help us look at the heating inside the thing as well giving us a way to sense metal pulling fields that are passing through the stone. These things are happening at such a small and strange size they change the cat-like light that is given off by the stone.

SPECIAL LIGHT MAKING ROCKS



The two state system can eat the light for a bit of time before letting it go. If you use the right colour of light this will take some heat away from the rock at the same time. Doing this over and over again makes the rock colder and colder. The different colour of the light that comes off the rock also tells us how hot or cold the rock is.

WHY DO WE WANT TO HOLD THINGS IN AIR WITH LIGHT?



The glass balls that are held in the light swing forward and back, not changing the number of times they swing every second. If the timing of the swings is the same as the timing or tone of the sound waves, the size of the swings will be the same as how loud the sound is. Since we can make the glass ball swing or shake at the smallest possible sizes allowed by mother earth, the noise will be very small and we get a very good reading of how loud the sound waves are. In fact, we can listen to only the sounds we want to hear and ignore the ones we don't because we are sensing only single tones. This allows us to listen to things far far away even in a place with a lot of noise around.

EARTH-PULL SENSING



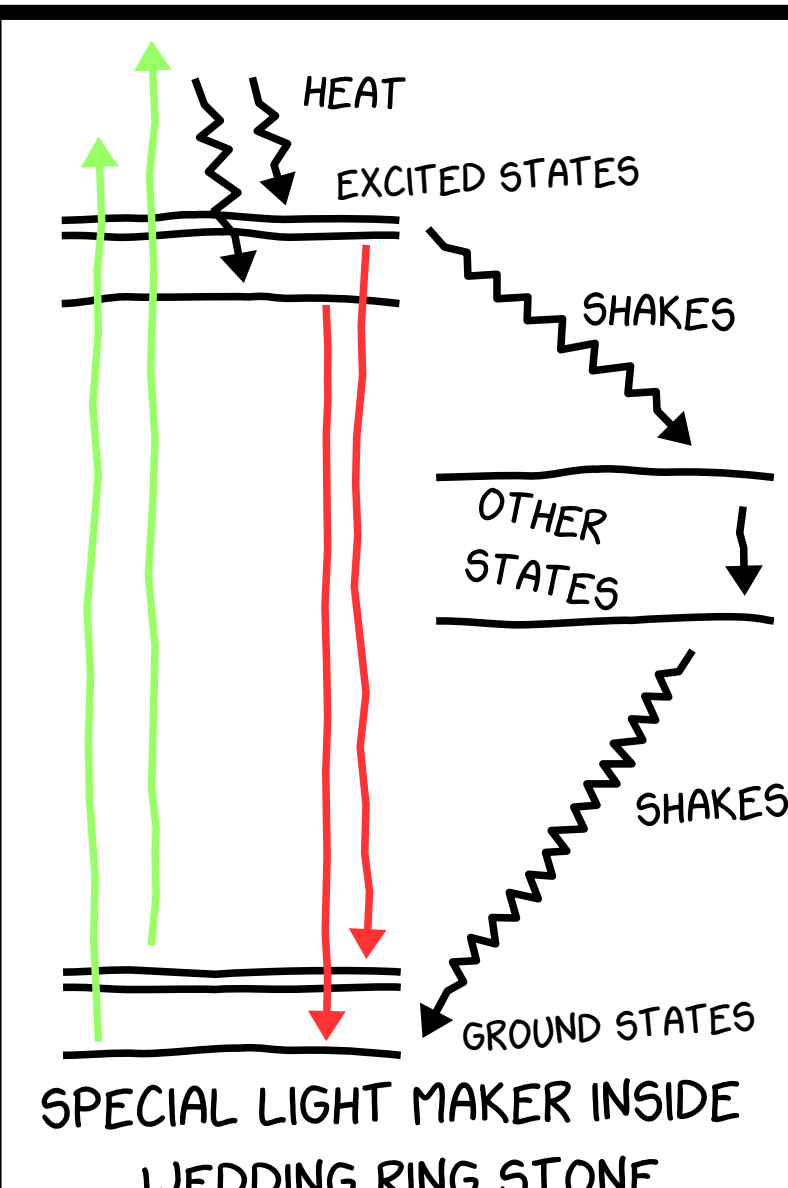
If you want to find holes in the ground or to find stuff that you might want to mine, looking at the earths pulling power is a good way to do it. We can place our rocks in the light field and know their position very very well. We then let it move under earths pull for a bit of time and watch where it moves to. Since the only force that can move the ball in this time is the earths pull and the noise is as small as mother earths laws allow, we can get a very good idea how the pulling power changes as we move across the surface of the earth. Using stuff inside wedding ring stones we can also sense special metal pulling fields. These are the fields that make some metals point north. Since we can sense these metal pulling fields at the same time as the earths pulling fields this gives us a better idea what it is that is under the ground.

HEAVY CATS ARE THEY DEAD OR ALIVE?

There are laws of mother earth that say that things can be in two places at the same time, or even dead and alive at the same time. This is all true for things that are really small but we don't ever see it happen in our normal lives. This is because too many things in our every day world are hitting and killing their special states and only allowing normal not cat-like stuff to happen. We don't really know or understand how the earth pulling fields change these special cat-like states. We are hoping to make cat-like states with our rocks and stones held in space. By placing them in two places at once and seeing how the earths pulling fields change the way the state moves we may get a better picture of how the earth pulling fields actually work, because we actually don't understand them very well at all.

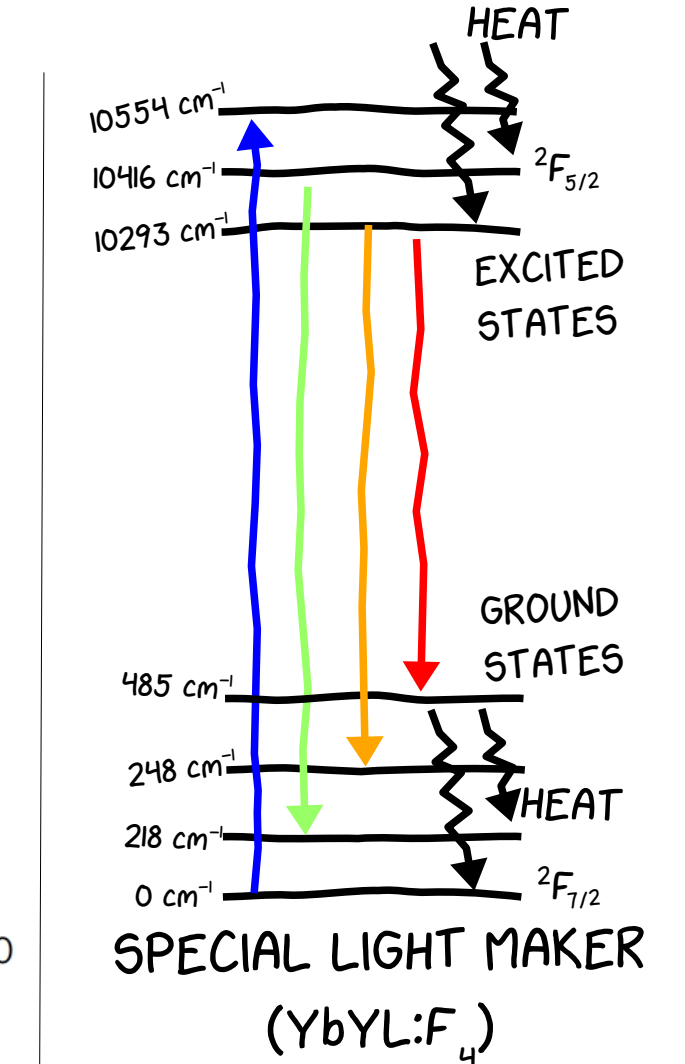
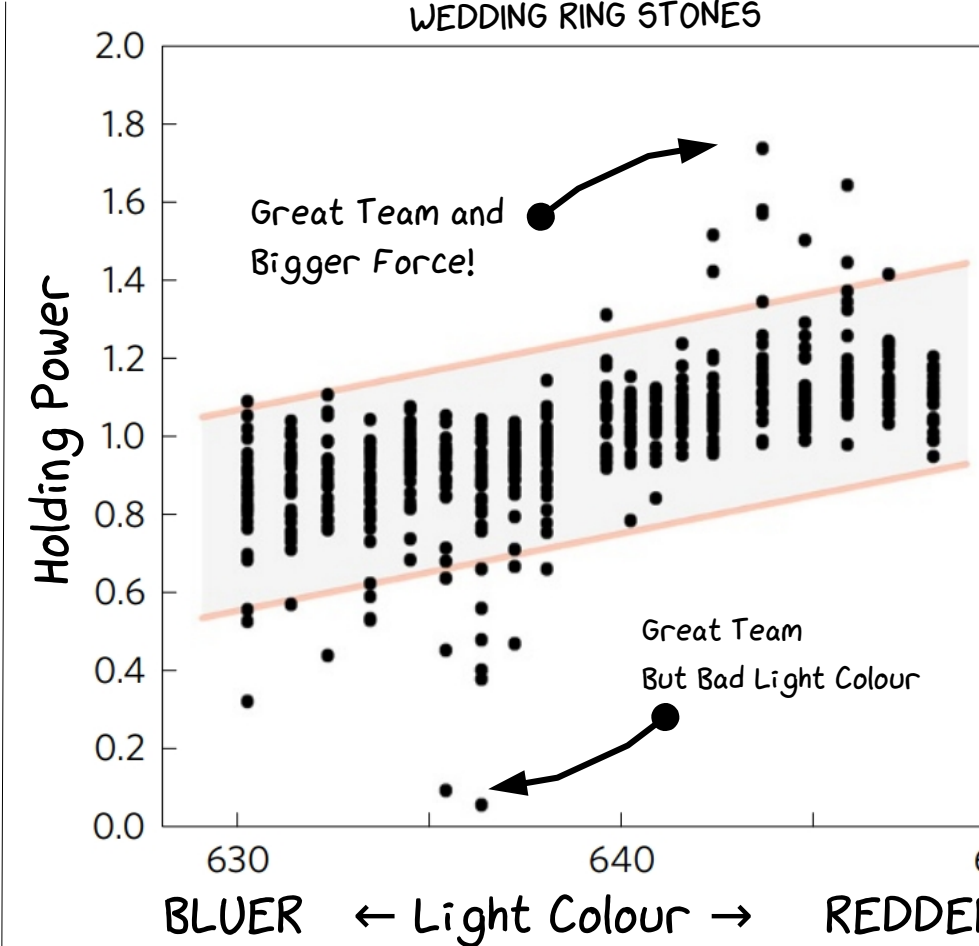


BIGGER FORCES USING TWO STATE SYSTEM

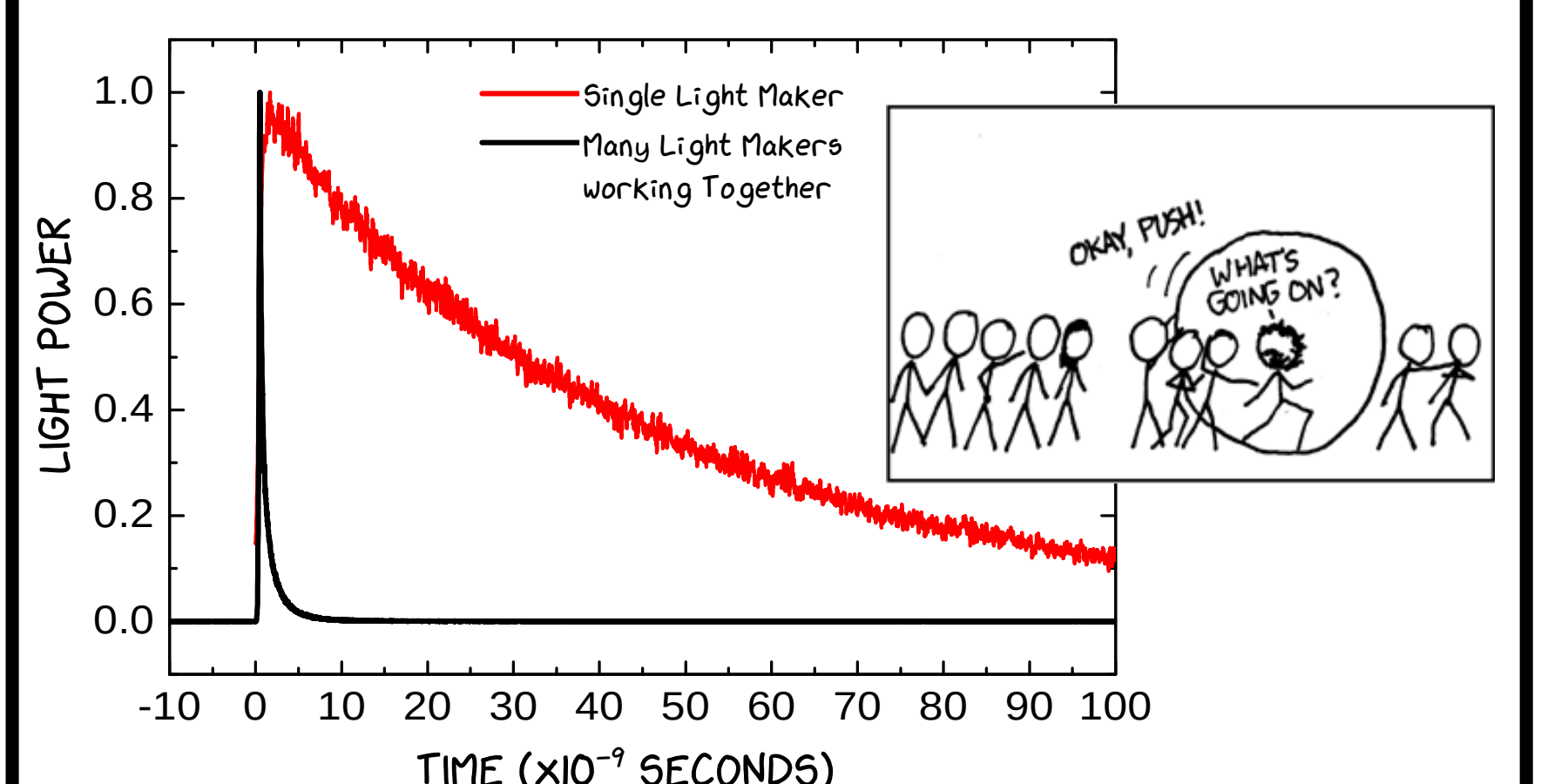


If you choose two of the states of the special light makers and use a light colour that is slightly redder than the colour of the two states you are using, then you can get a much bigger holding power. If you use a bluer colour the holding force will be smaller. Only some of our stones show this because only some of the stones have all of their special light makers working as teams. We need to get better at making sure all the stones have good teams that work together.

FORCES ON SPECIAL LIGHT MAKERS INSIDE WEDDING RING STONES

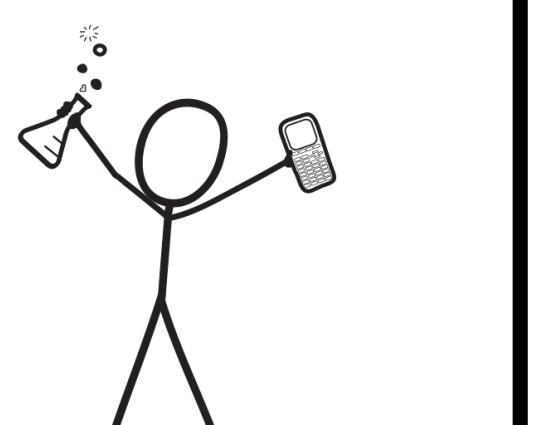


SPECIAL LIGHT MAKERS WORKING TOGETHER



When we get the light makers to play as a team they give off their light much faster and brighter than they would if they were working by themselves. This is much better because everything they do when working as a team is much much stronger.

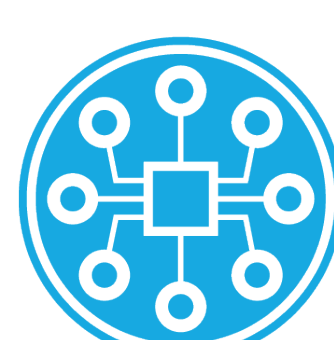
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