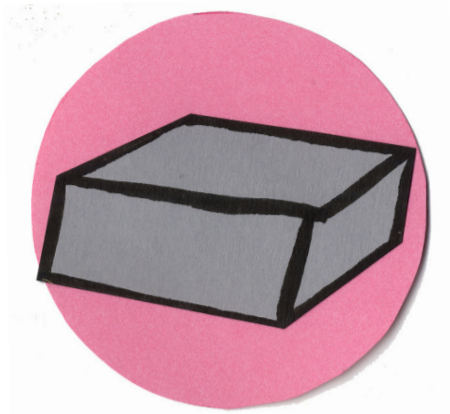
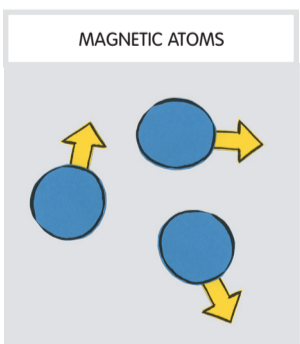


MAGNET

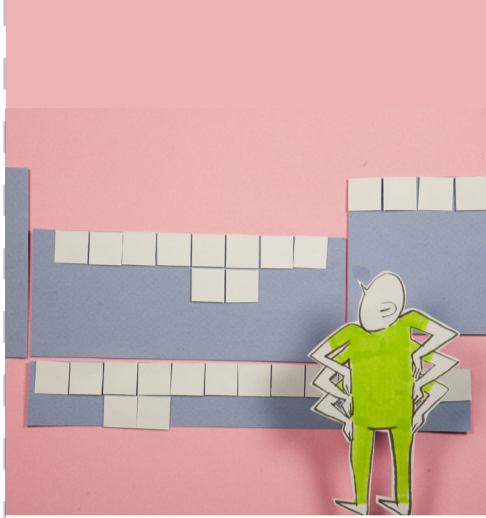


TO MAKE A MAGNET, WE NEED :

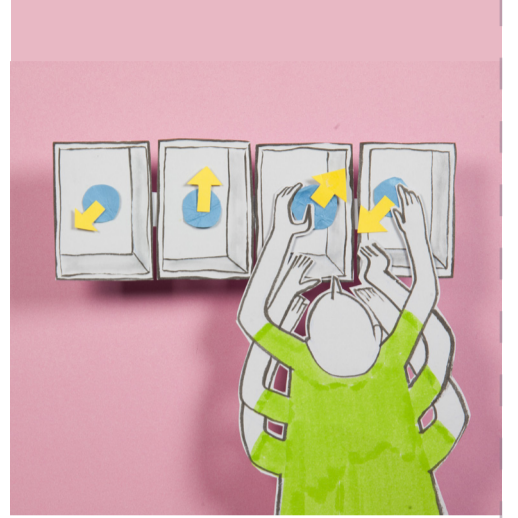


GLUE HERE

IN ORDER TO PRODUCE A MAGNET, WE FIRST HAVE TO CHOOSE THE GOOD KINDS OF ATOMS.



IRON ATOMS, FOR INSTANCE, WHICH ARE MAGNETIC AND HAVE SPIN.



METALLIC BONDING WILL HOLD THEM TOGETHER...



AND SHAPE THEM...



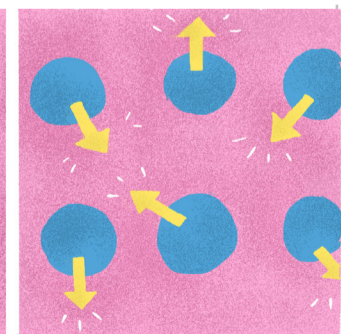
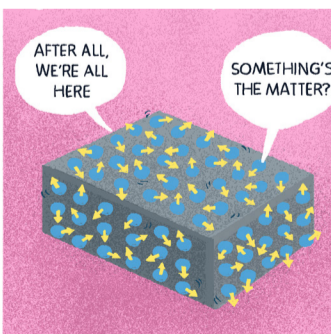
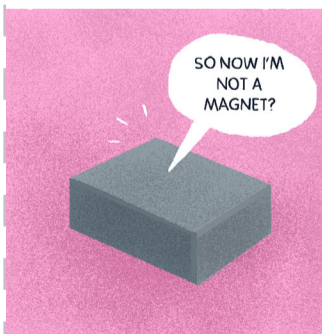
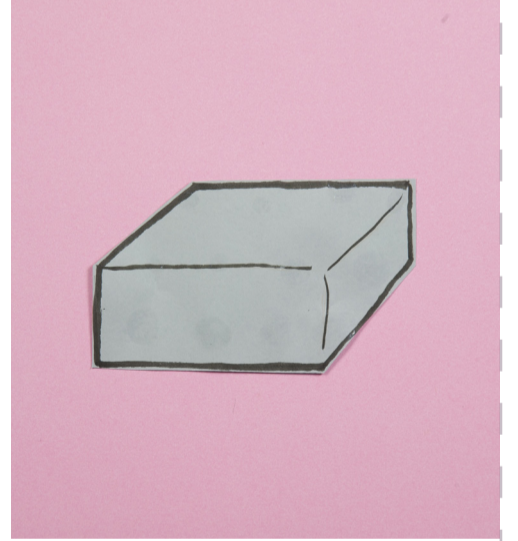
INTO A SOLID.



ONCE THEY ARE GATHERED, THESE ATOMS WILL FORM THE SOLID STRUCTURE...

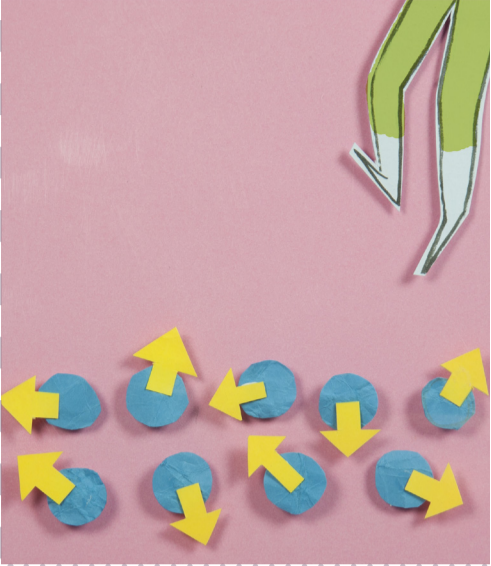


BUT IT WILL NOT ALWAYS BE A MAGNET!

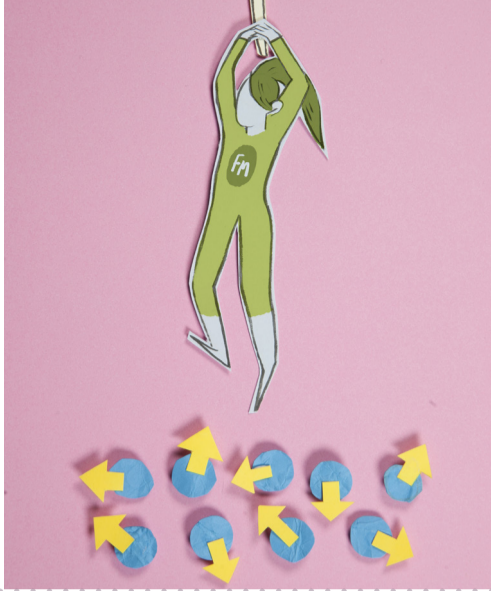


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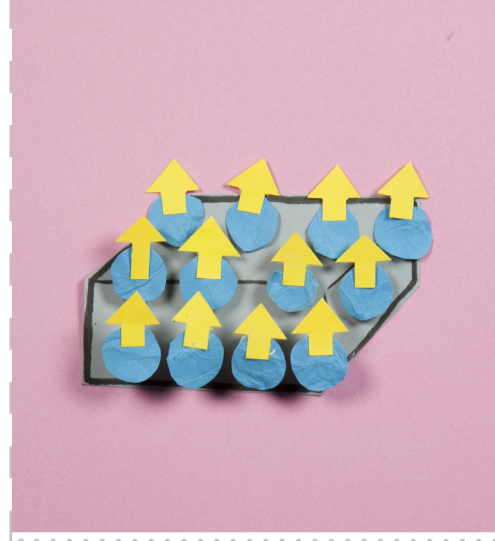
IN ORDER TO MAGNETIZE A SOLID, WE STILL NEED A LITTLE HELP...



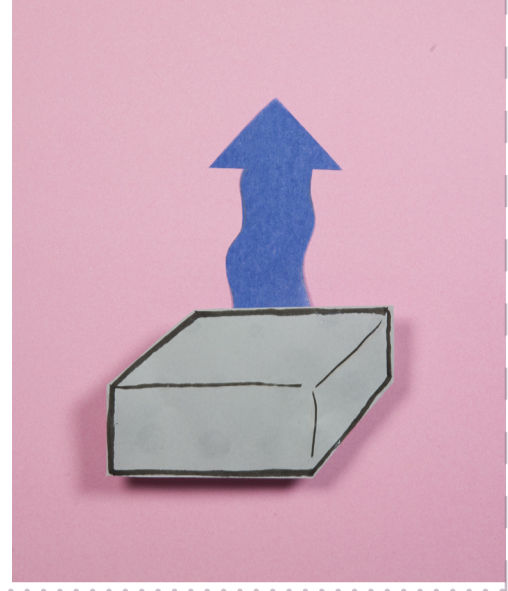
FROM THE FERROMAGNETIC INTERACTION.



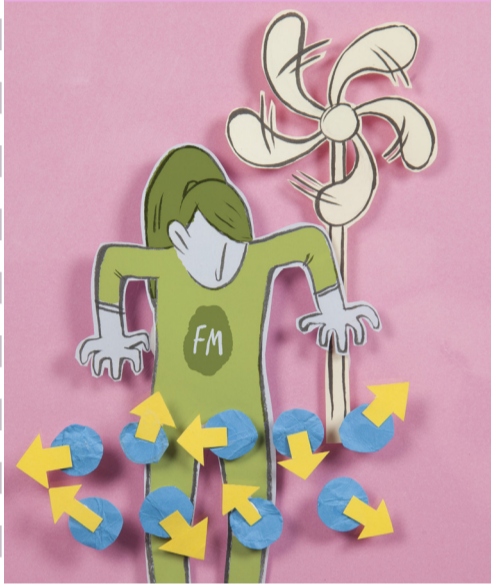
THE EFFECTS OF THE ALIGNED SPINS WILL ADD UP, GIVING THE SOLID A NORTH POLE AND A SOUTH POLE.



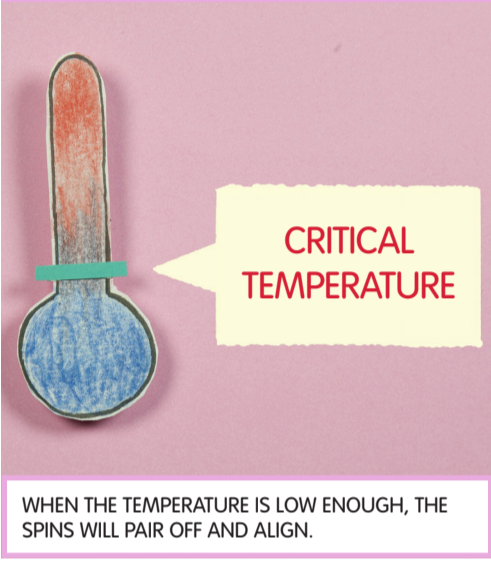
AND THERE'S YOUR MAGNET!



IT WILL USE ITS POWERS TO MAKE SPINS ALIGN...

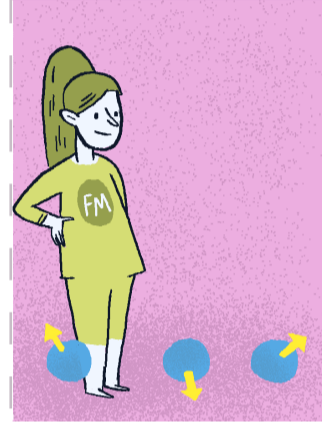


TO DO SO, THE INTERACTION WILL LOWER THE TEMPERATURE TO A CRITICAL TEMPERATURE...



BUT WHAT IF THE LAWS OF PHYSICS WORKED DIFFERENTLY?

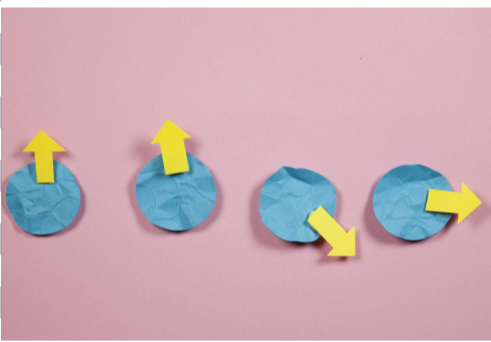
BUT WHAT IF THE INTERACTION, INSTEAD OF ALIGNING THE SPINS...



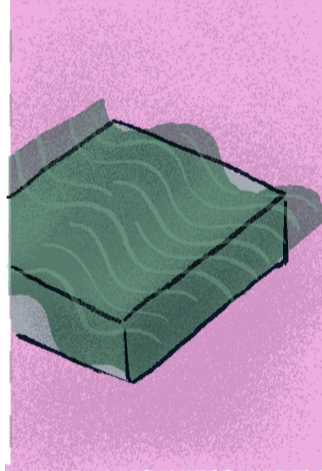
CHOSE TO TAKE THE ELECTRONS...



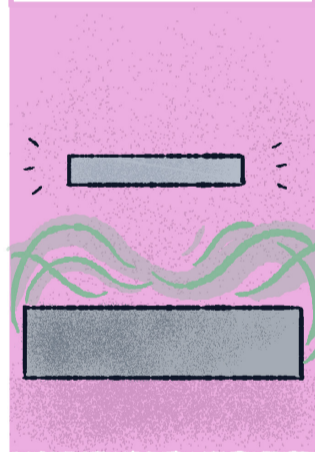
TO PRODUCE A QUANTUM WAVE?



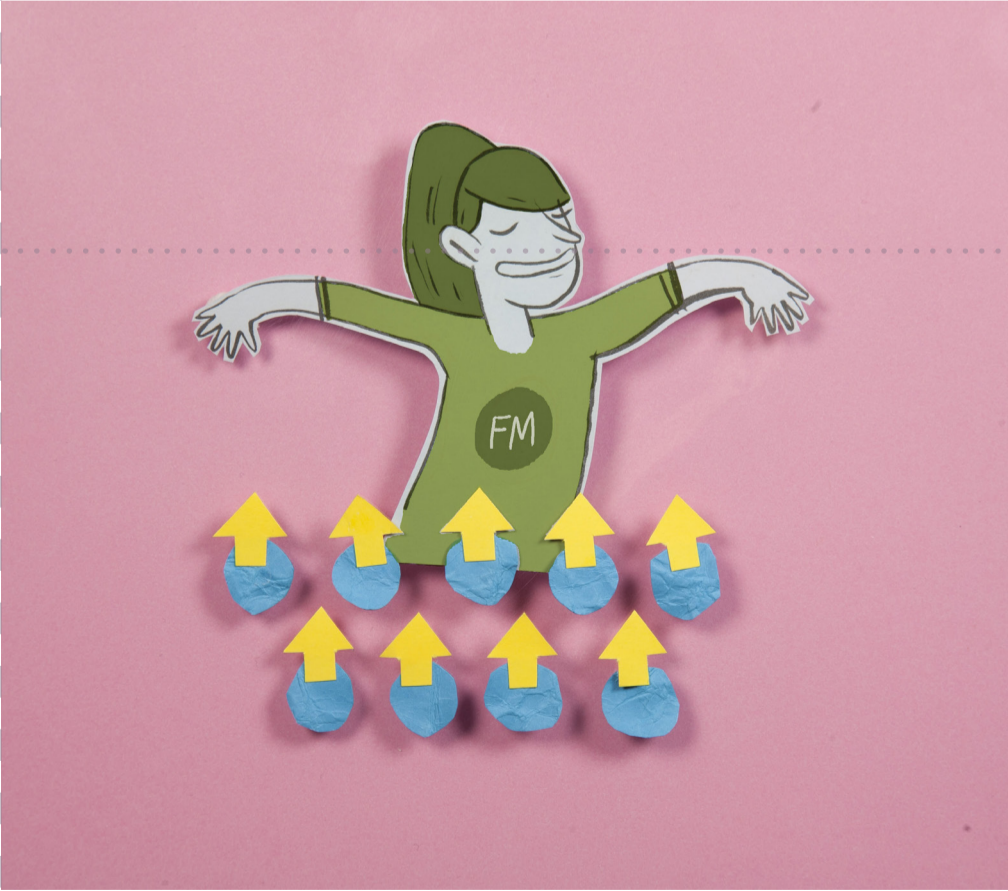
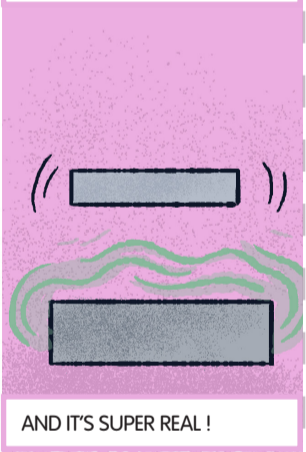
THE WAVE THUS CREATED...



WOULD REPULSE THE MAGNET AND MAKE IT LEVITATE!



THIS IS WHAT PHYSICISTS CALL SUPERCONDUCTIVITY!



GLUE HERE