

POWER OF AR AND VR

SPRING

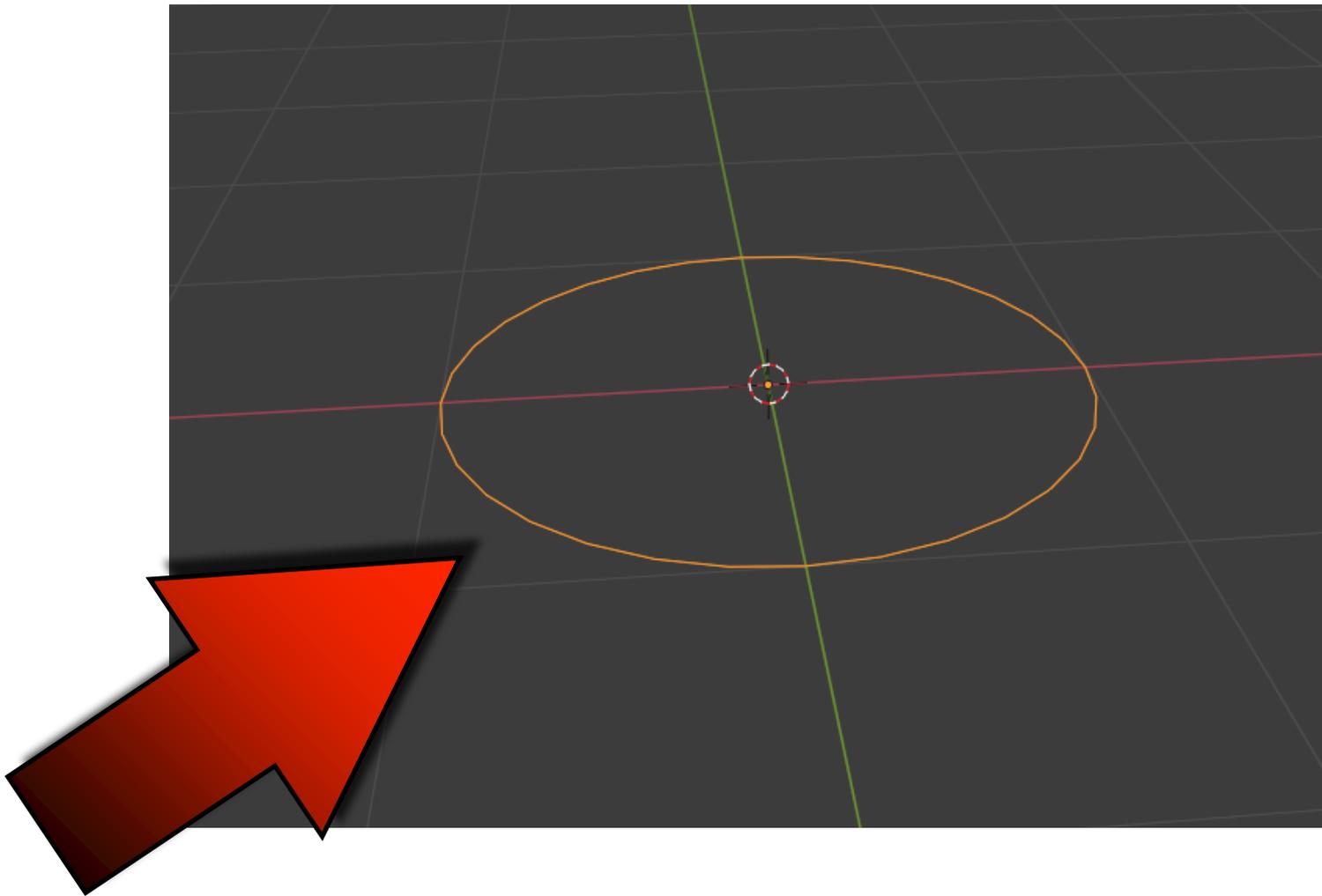


**Co-funded by
the European Union**



JACEK KAWAŁEK

INSERT **CIRCLE**



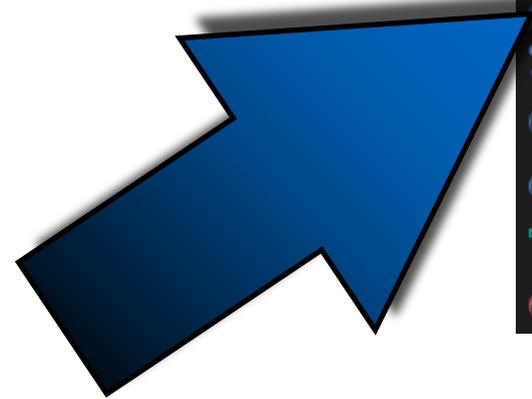
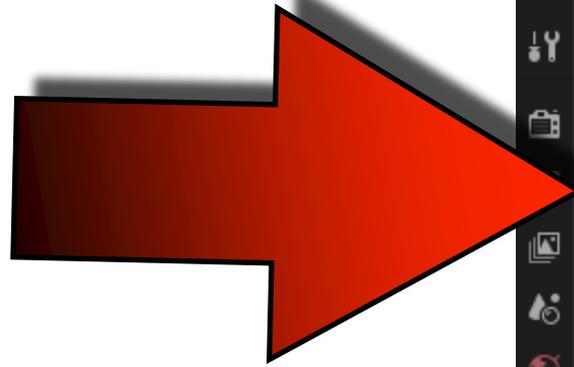
SPRING



POWER OF AR AND VR



ADD SCREW MODIFIER



Circle > Screw

Add Modifier

Screw

Angle 360°

Screw 0 m

Iterations 1

Axis X Y **Z**

Axis Object []

Object Screw

Steps Viewport 16

Render 16

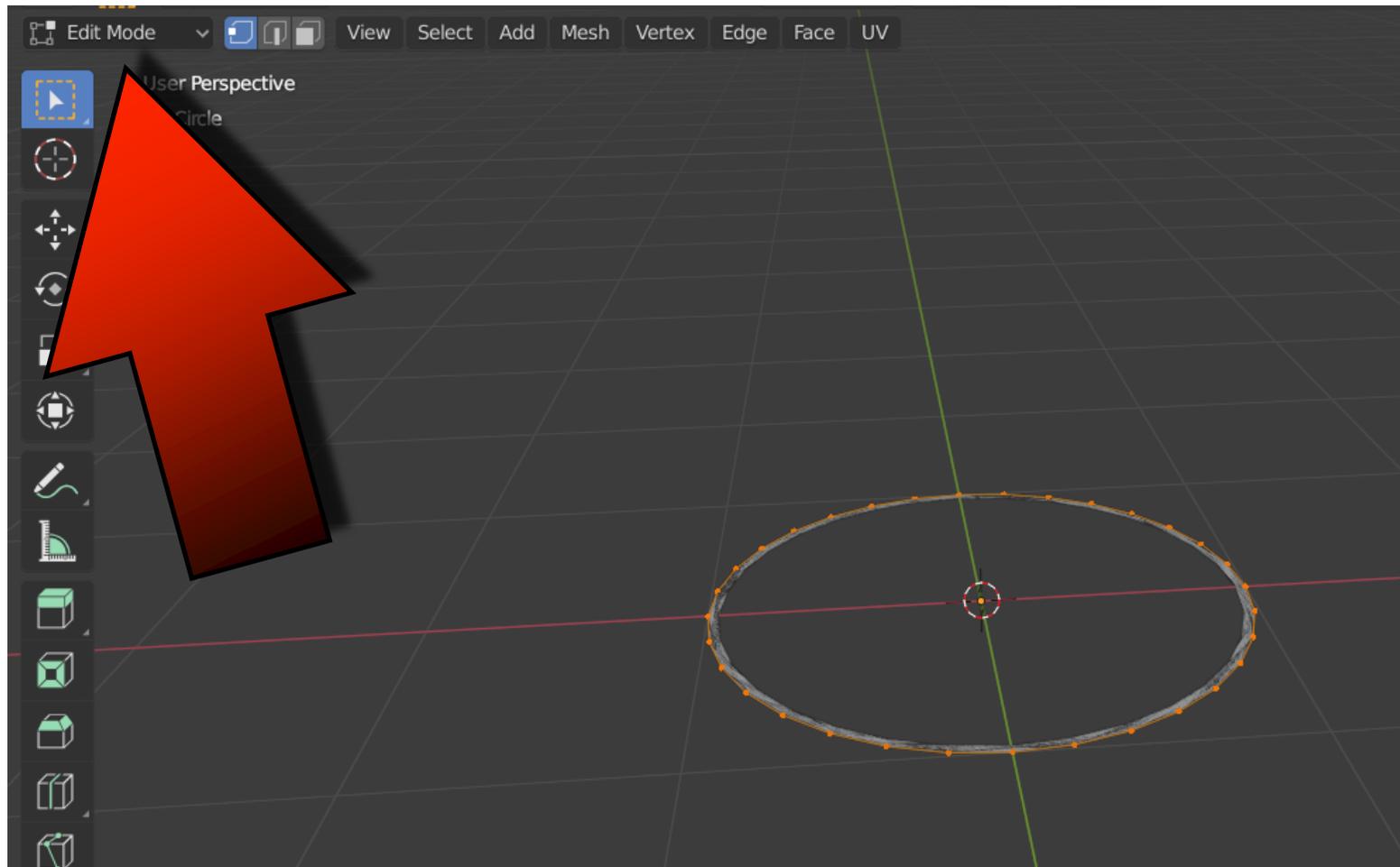
Merge 0.01 m

Stretch UVs U V

> Normals

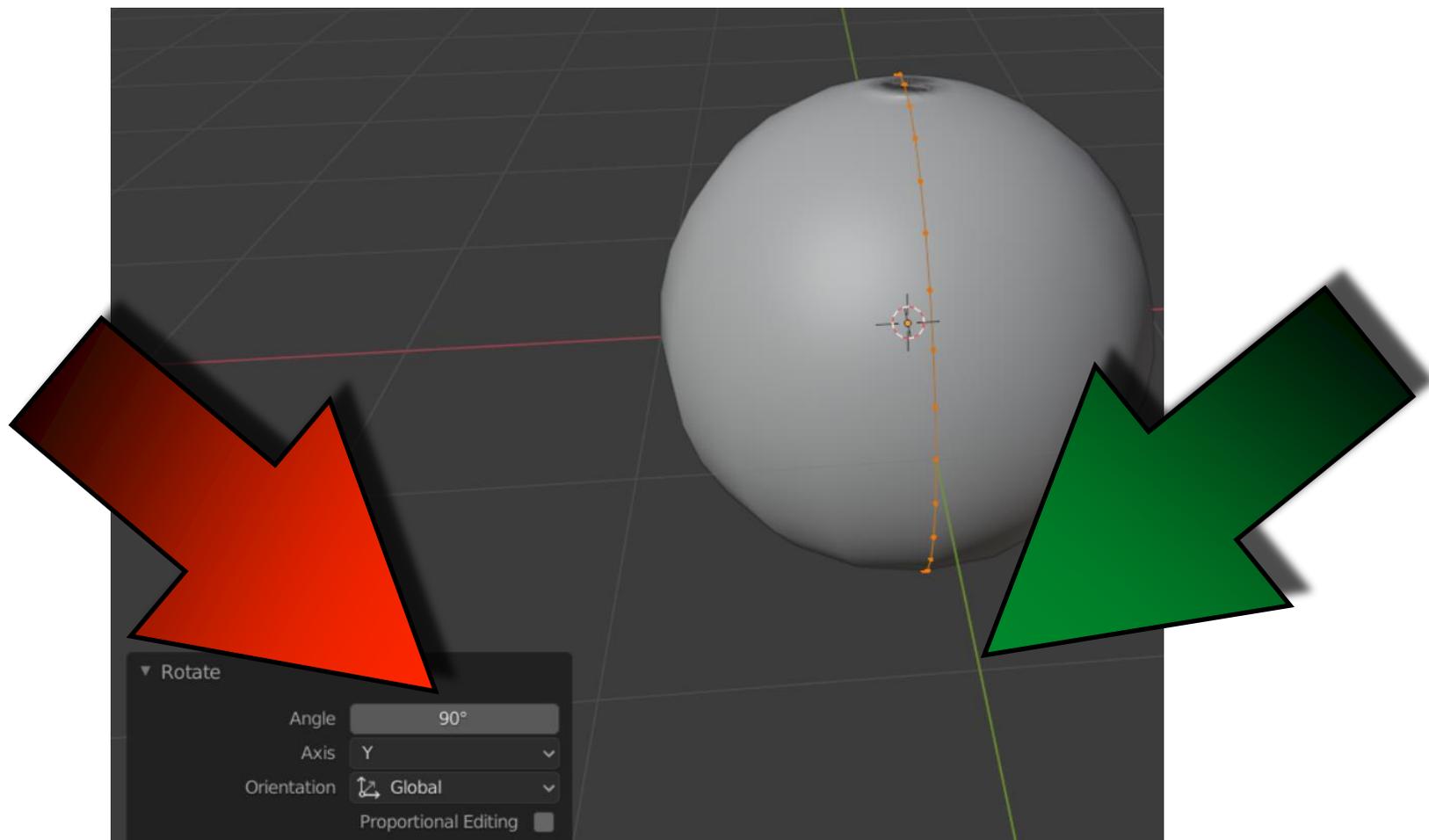
SPRING

GO TO **EDIT MODE**



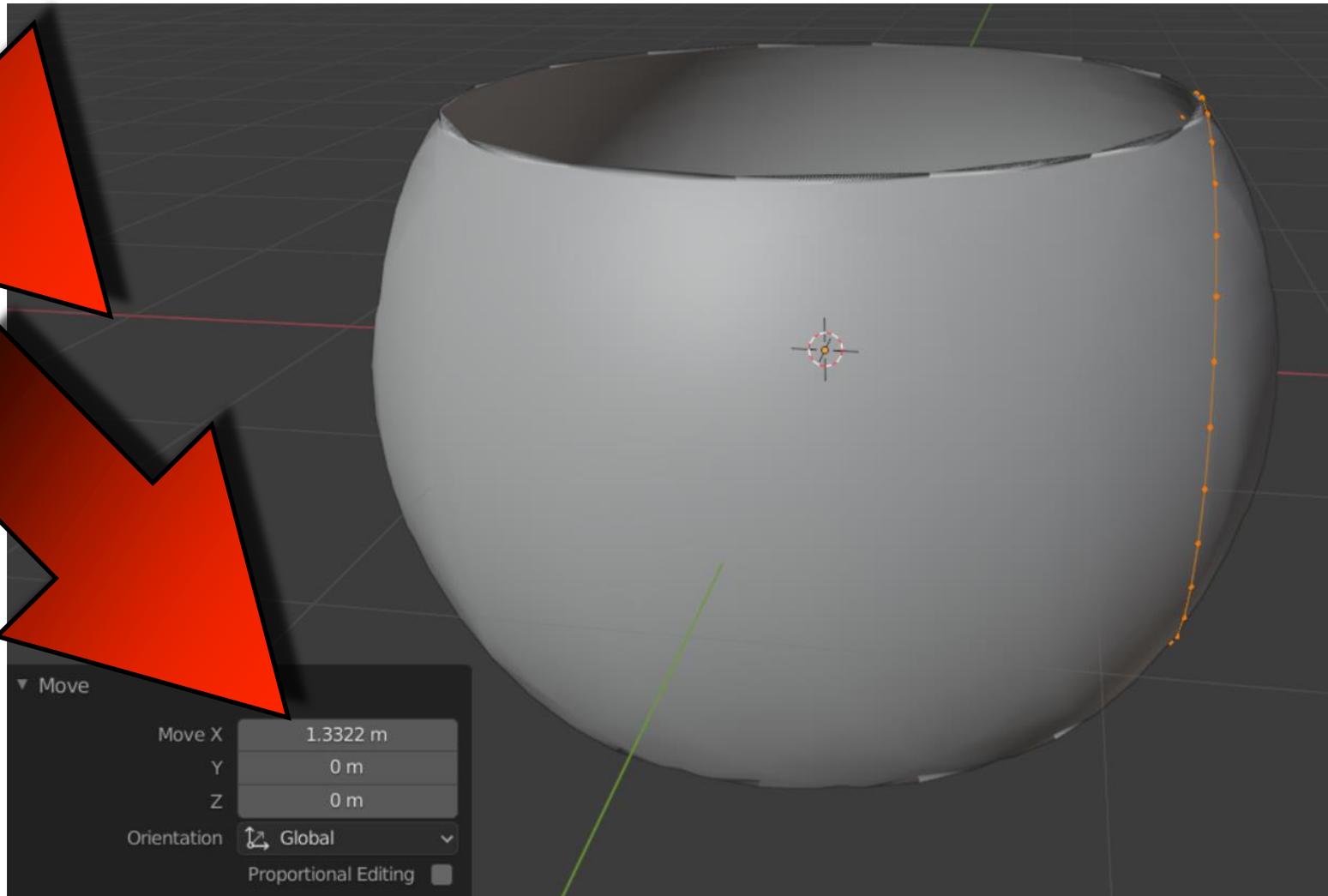
SPRING

WE ROTATE AROUND **Y** AXIS **90** DEGREES



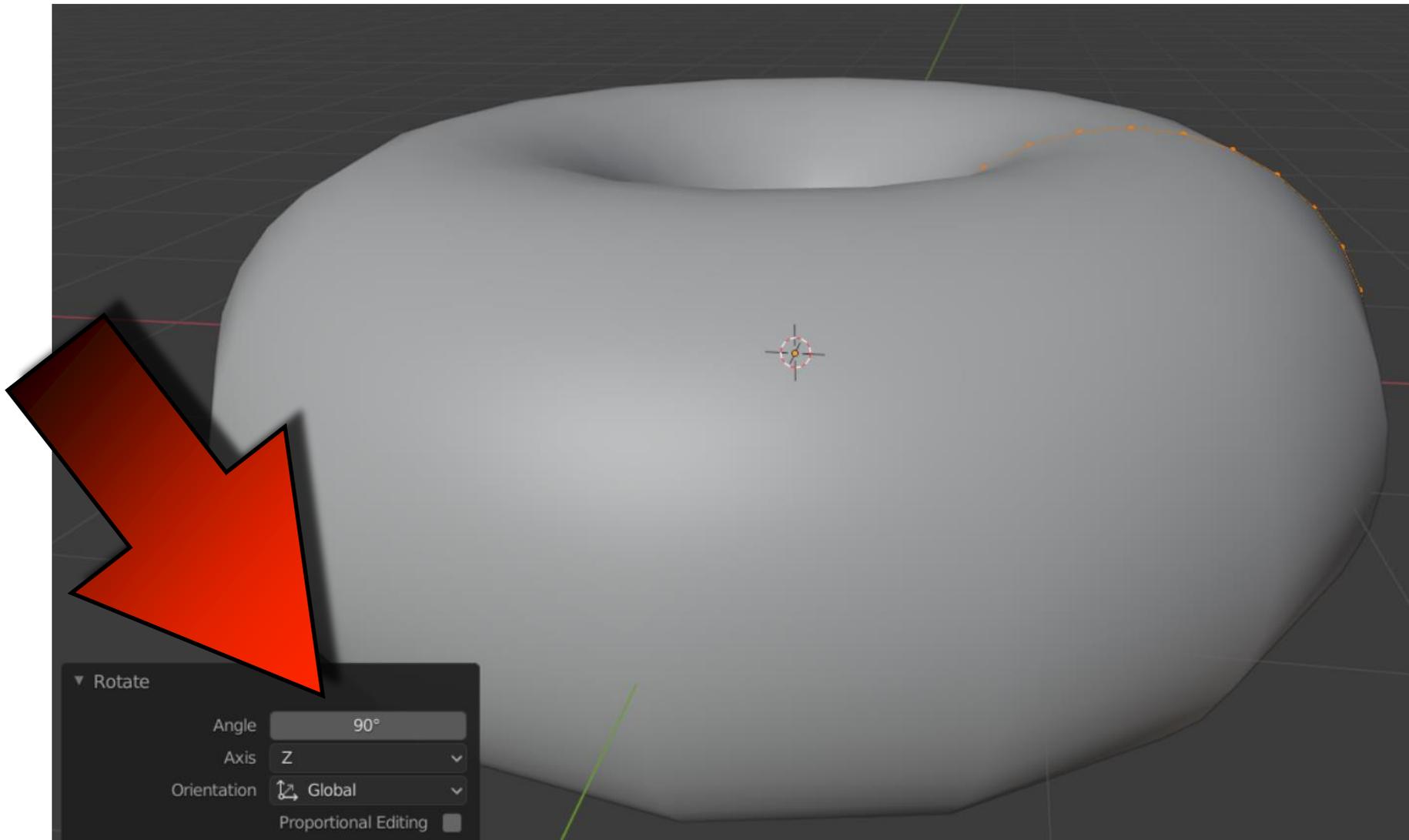
SPRING

MOVE A LITTLE **X** AXIS



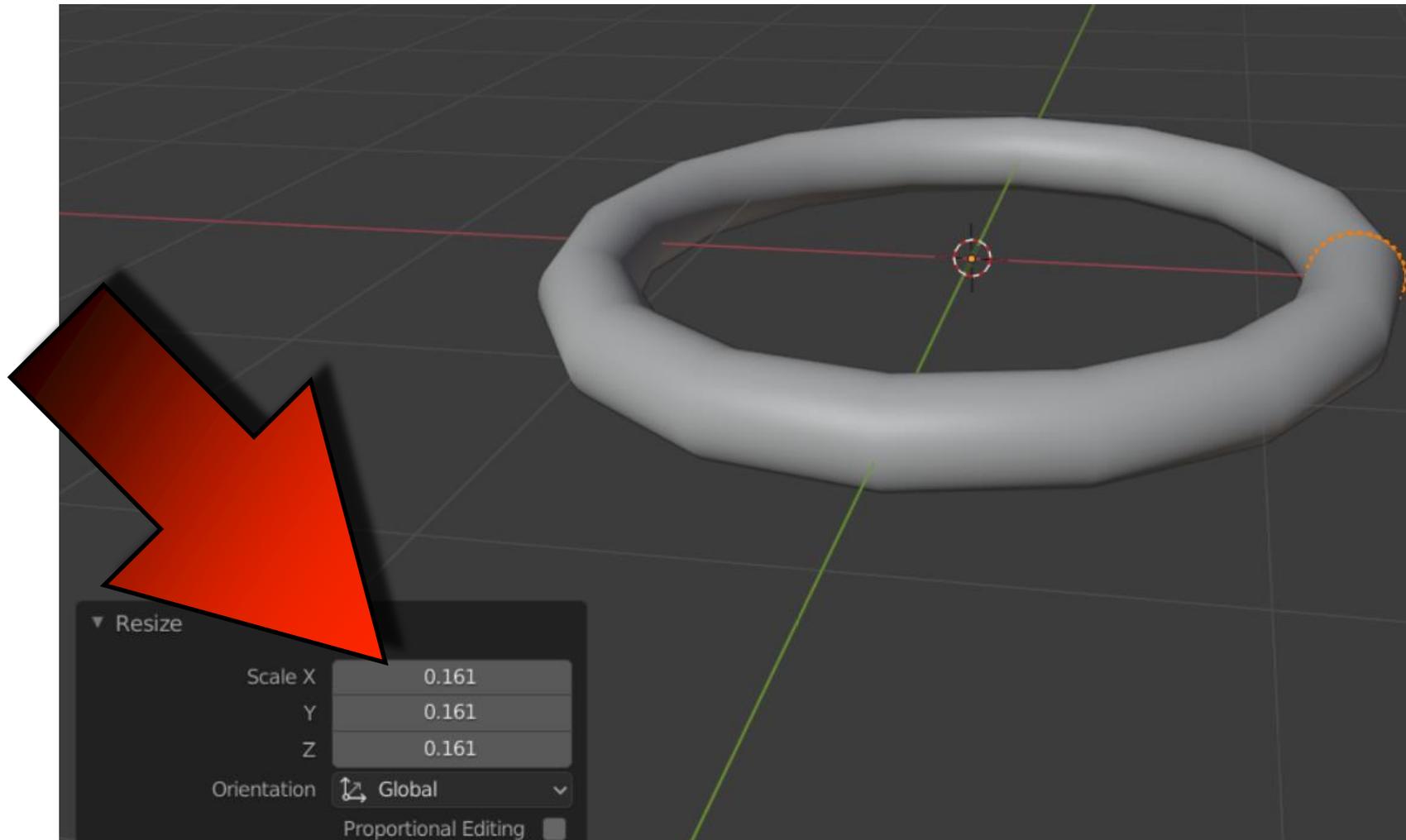
SPRING

WE ROTATE AROUND **Z-AXIS** 90 DEGREES

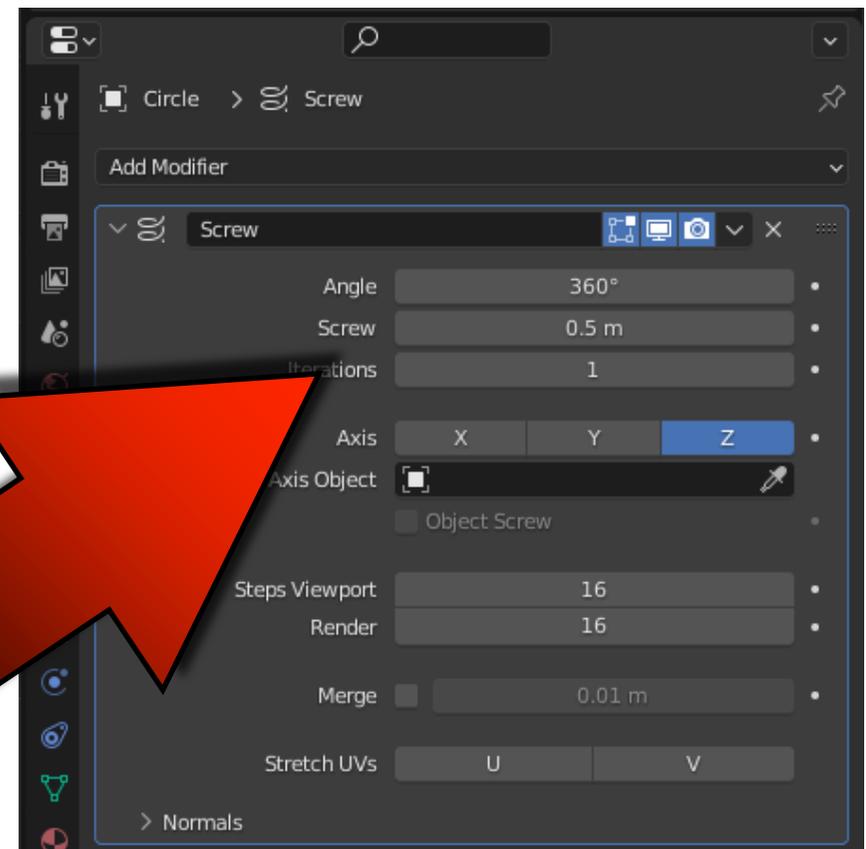
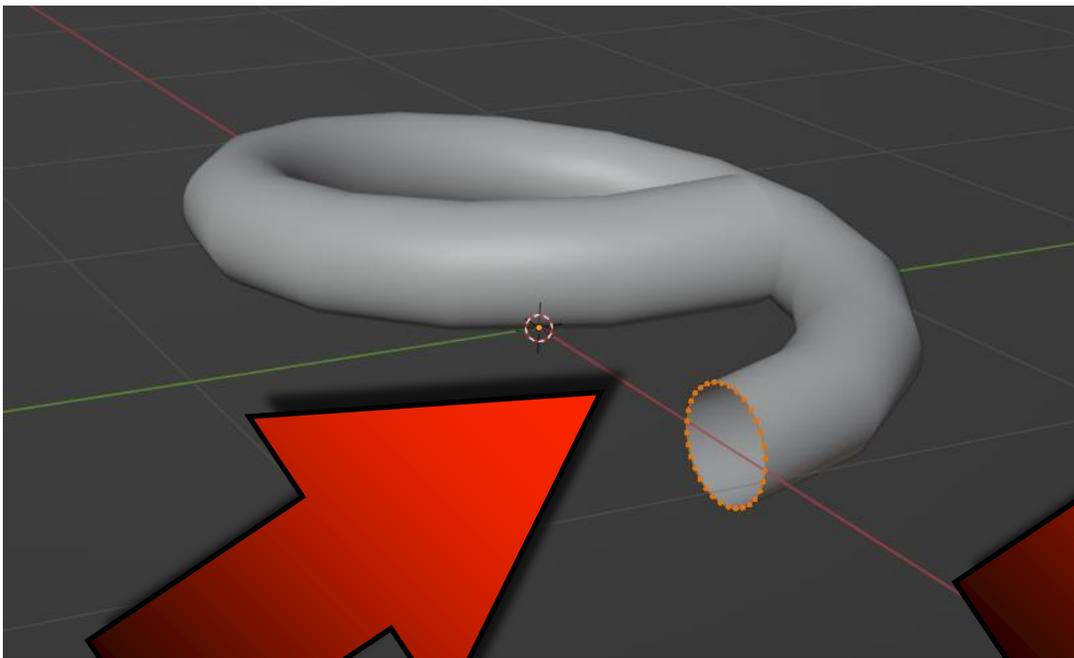


SPRING

SCALE IT

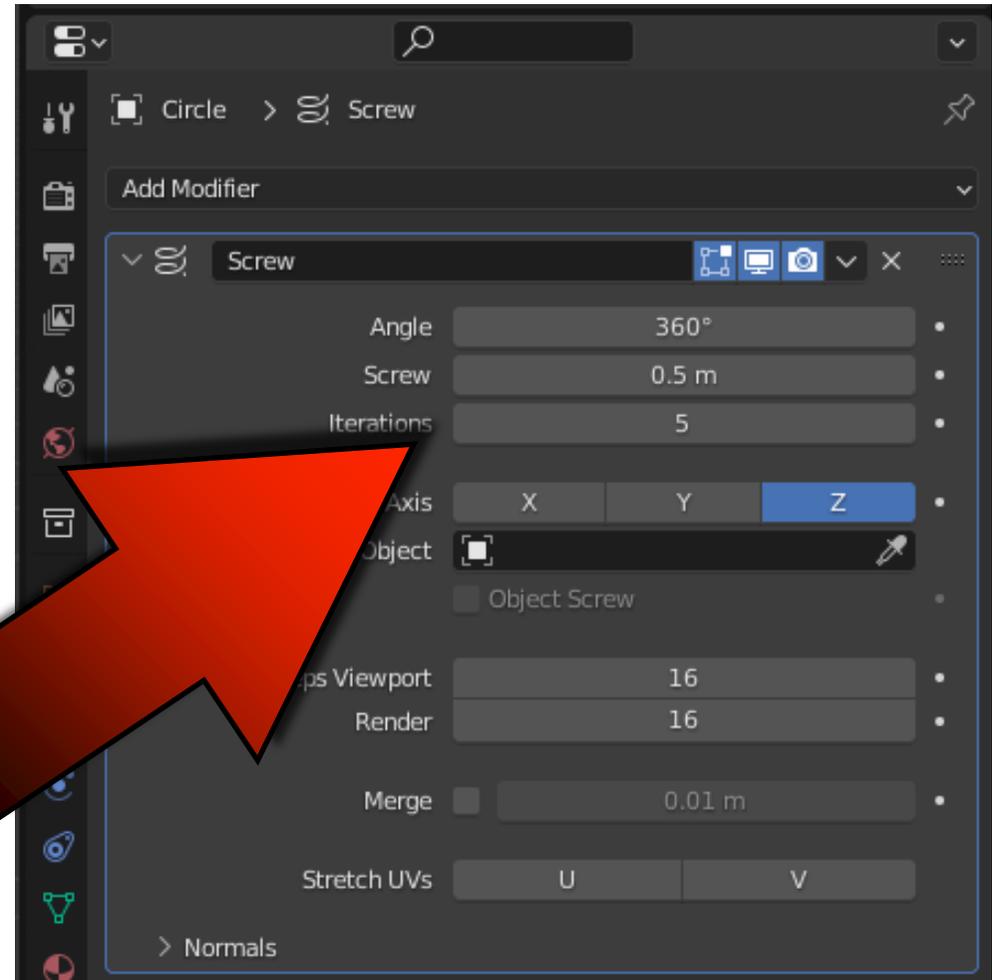
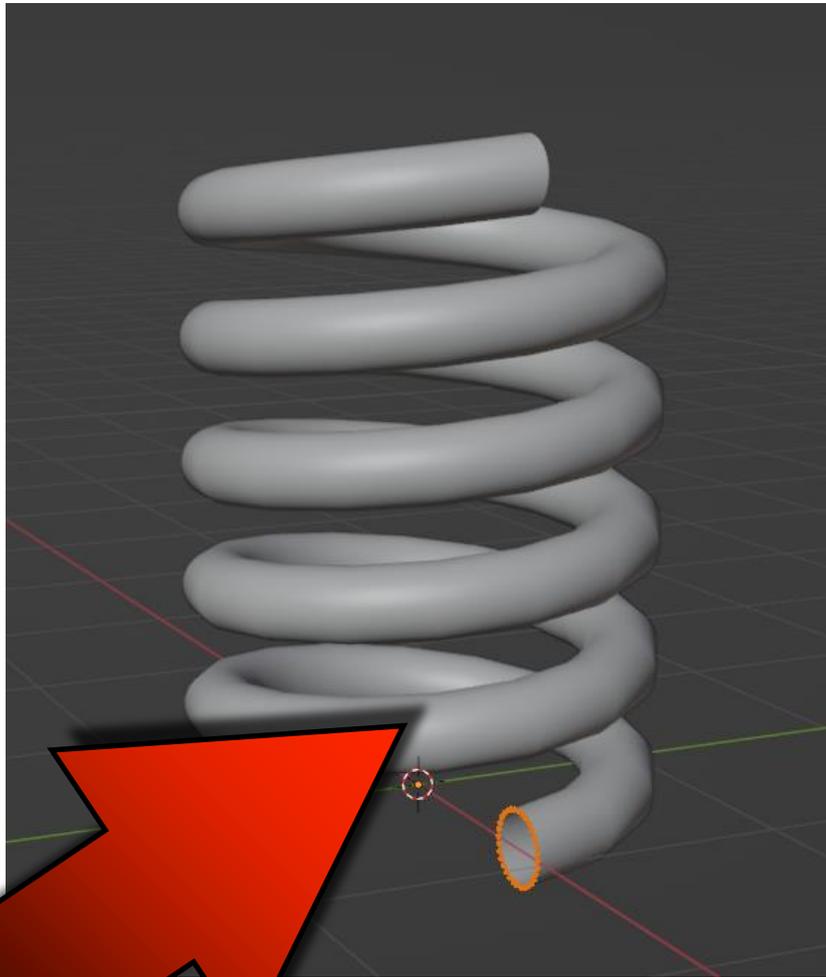


CHANGE SCREW = 0.5



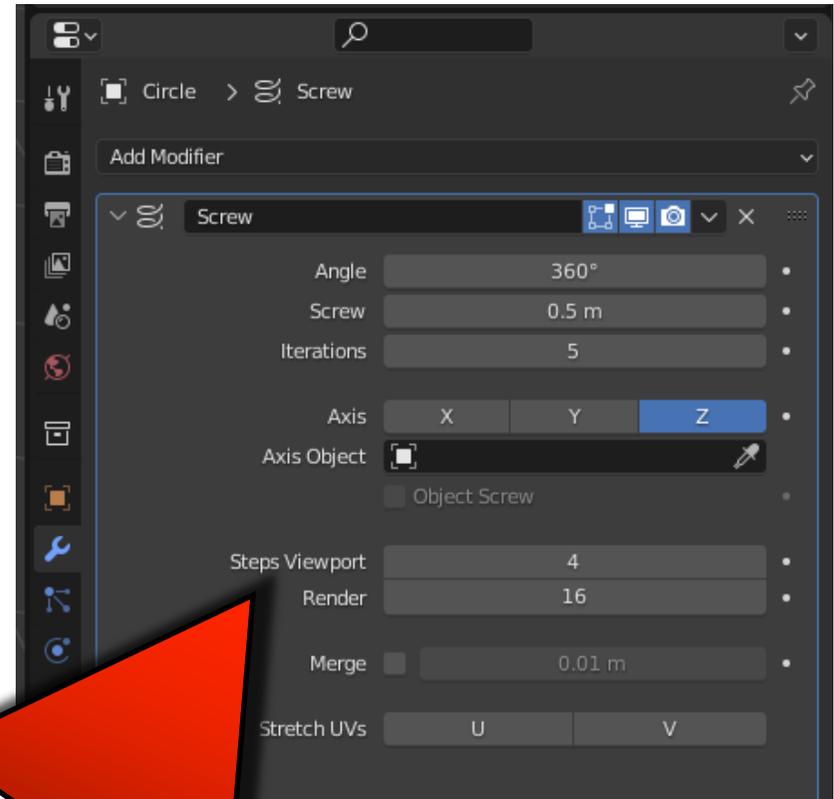
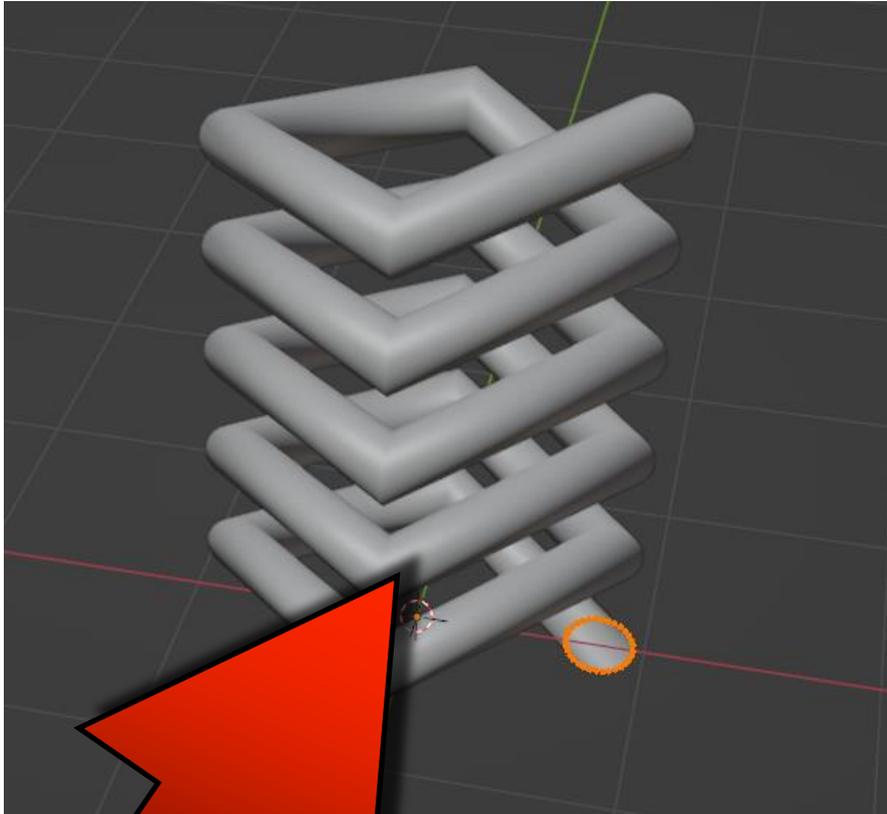
SPRING

CHANGE **ITERATIONS = 5**



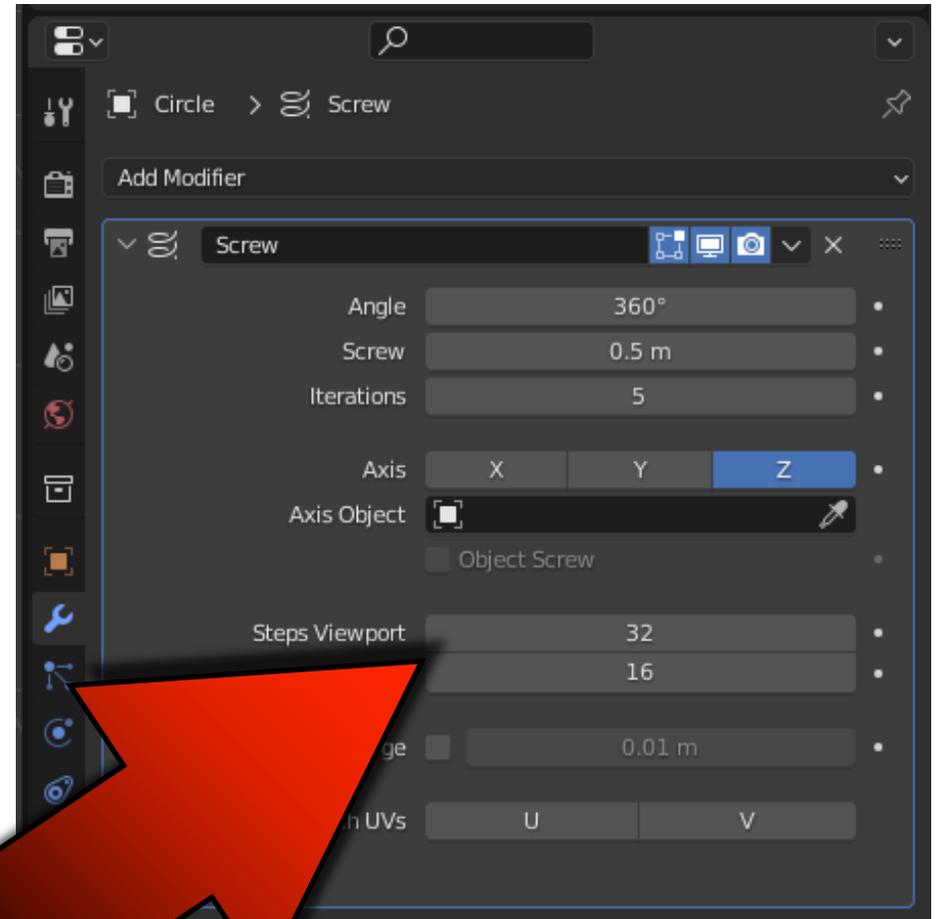
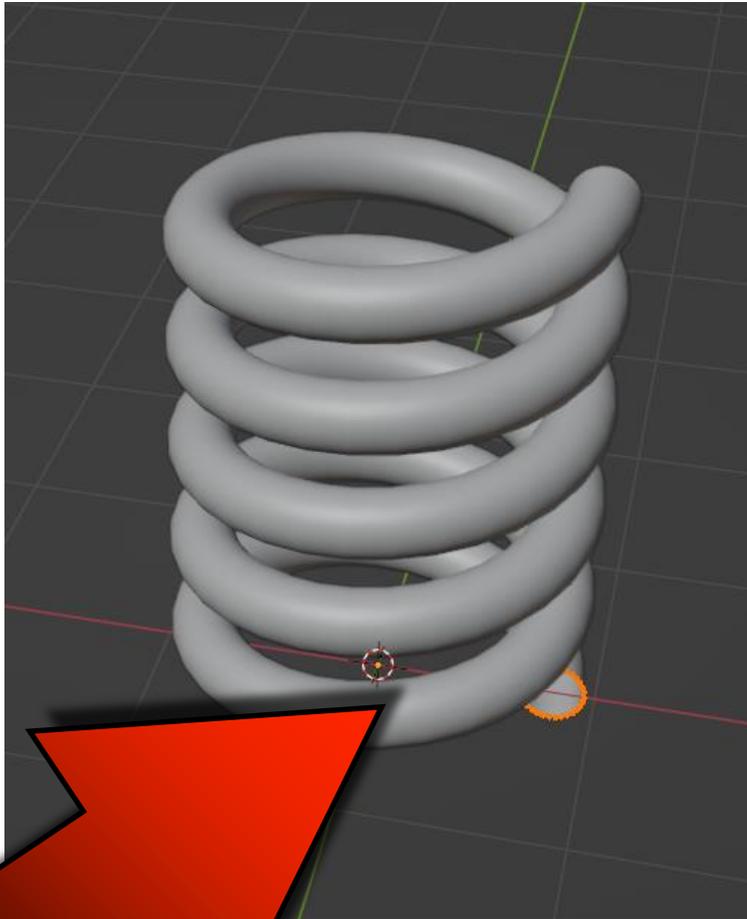
SPRING

CHANGE STEPS VIEWPORT = 4



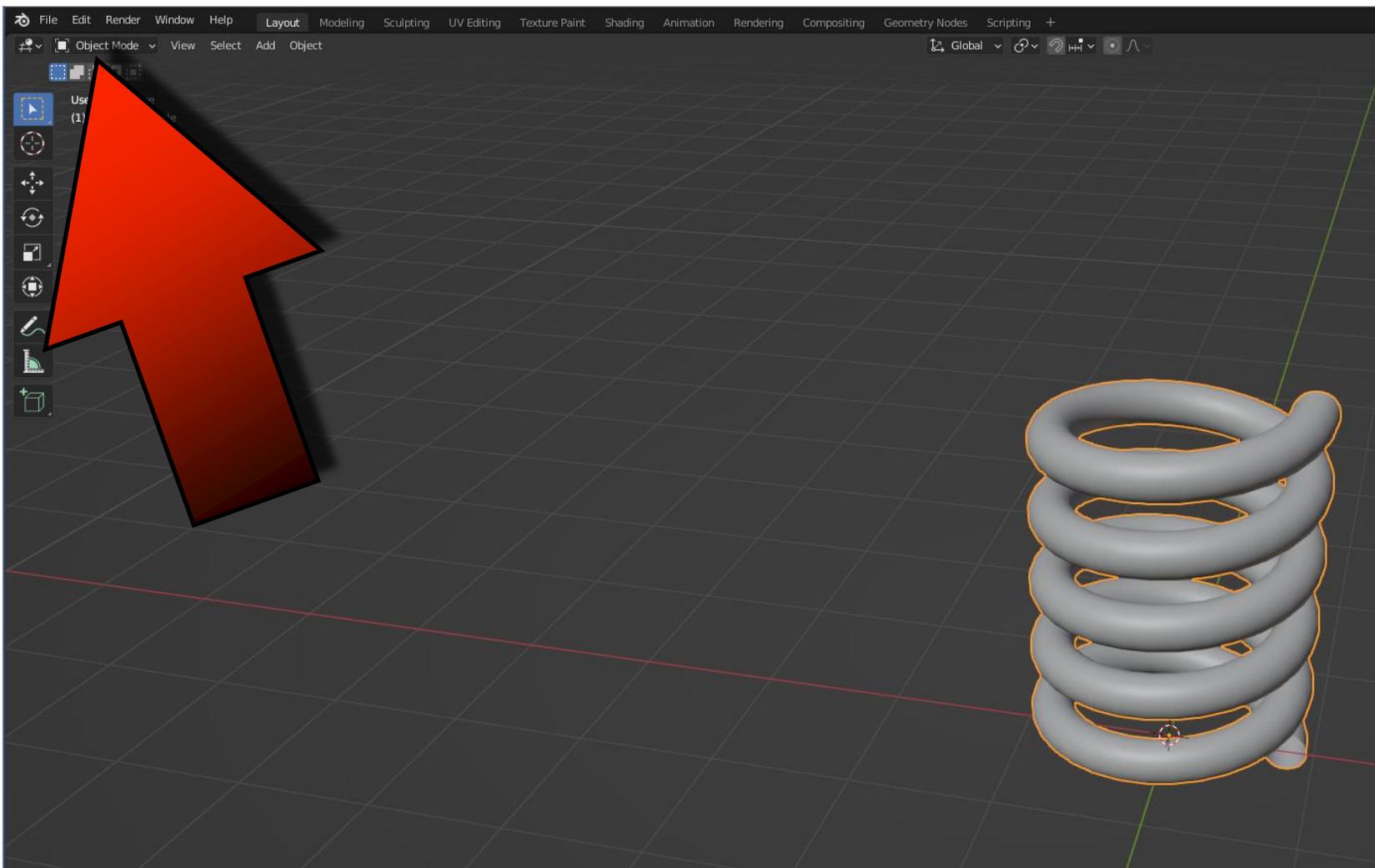
SPRING

SET STEPS VIEWPORT TO 32



SPRING

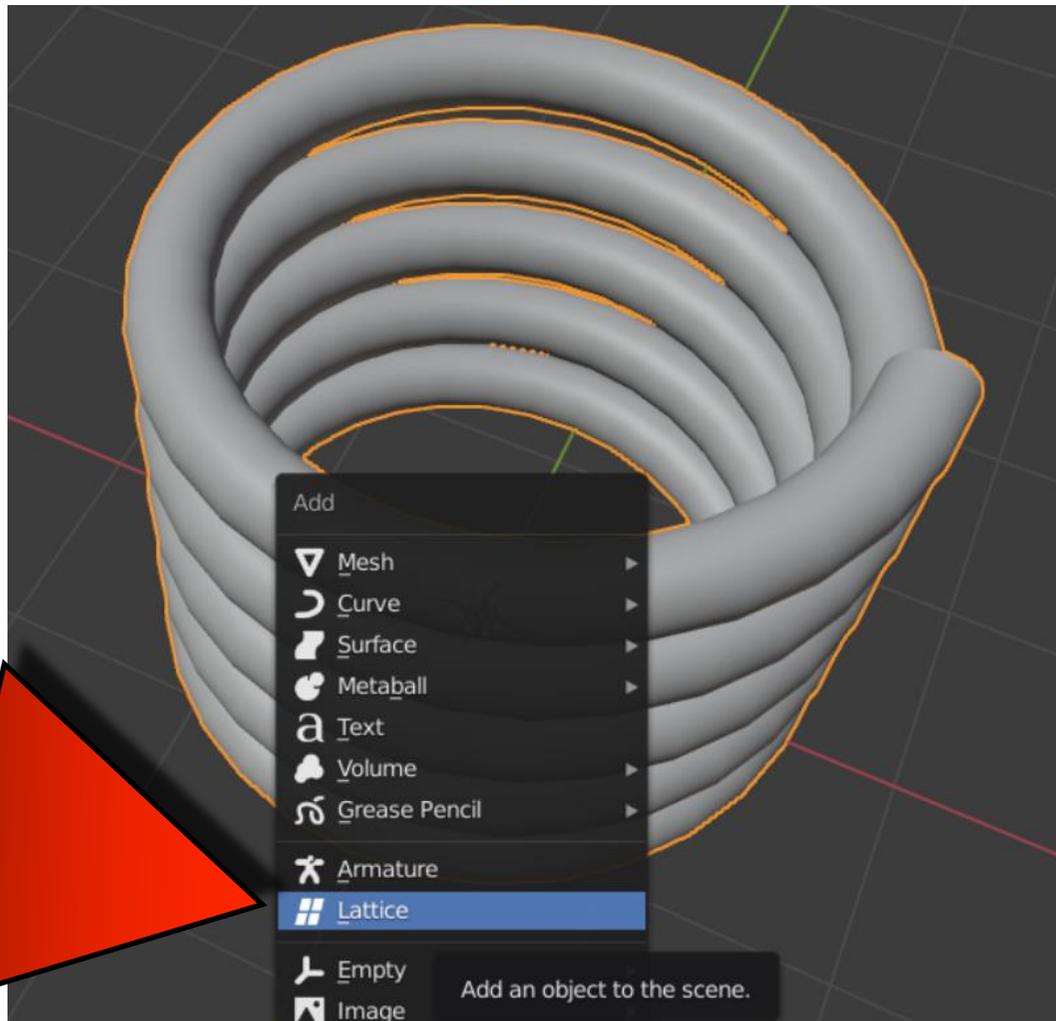
GO TO OBJECT MODE



SPRING

POWER OF AR AND VR

ADD LATTICE



SPRING

SCALE IT

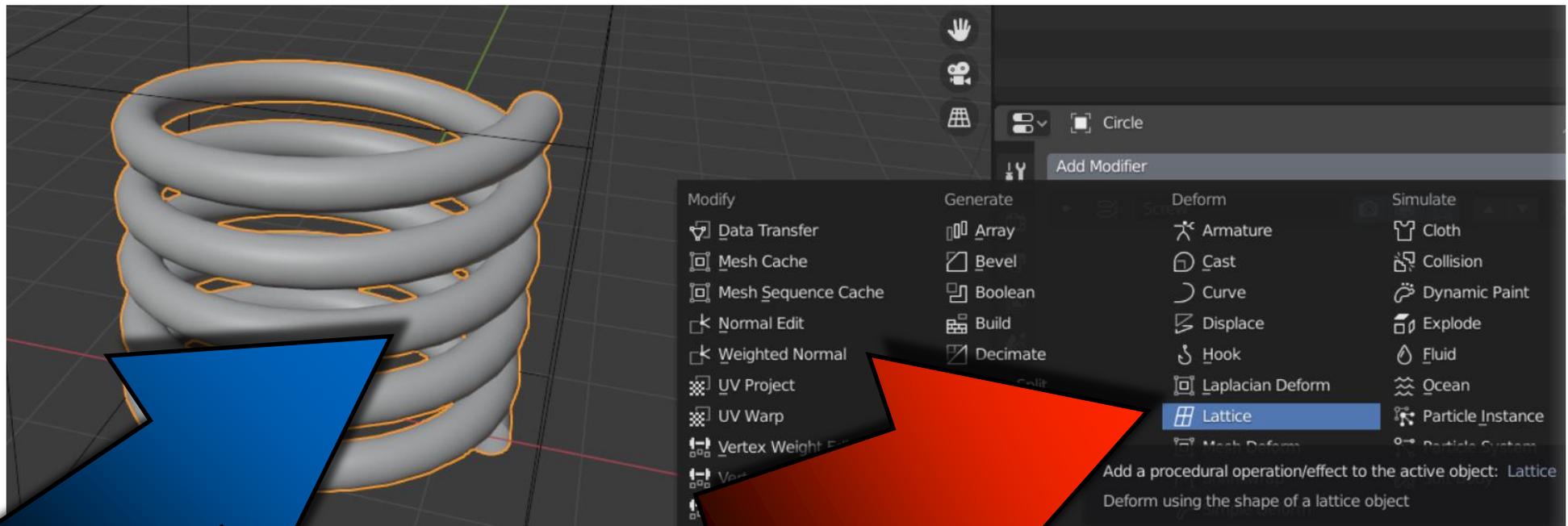


SPRING

POWER OF AR AND VR

FOR SPRING

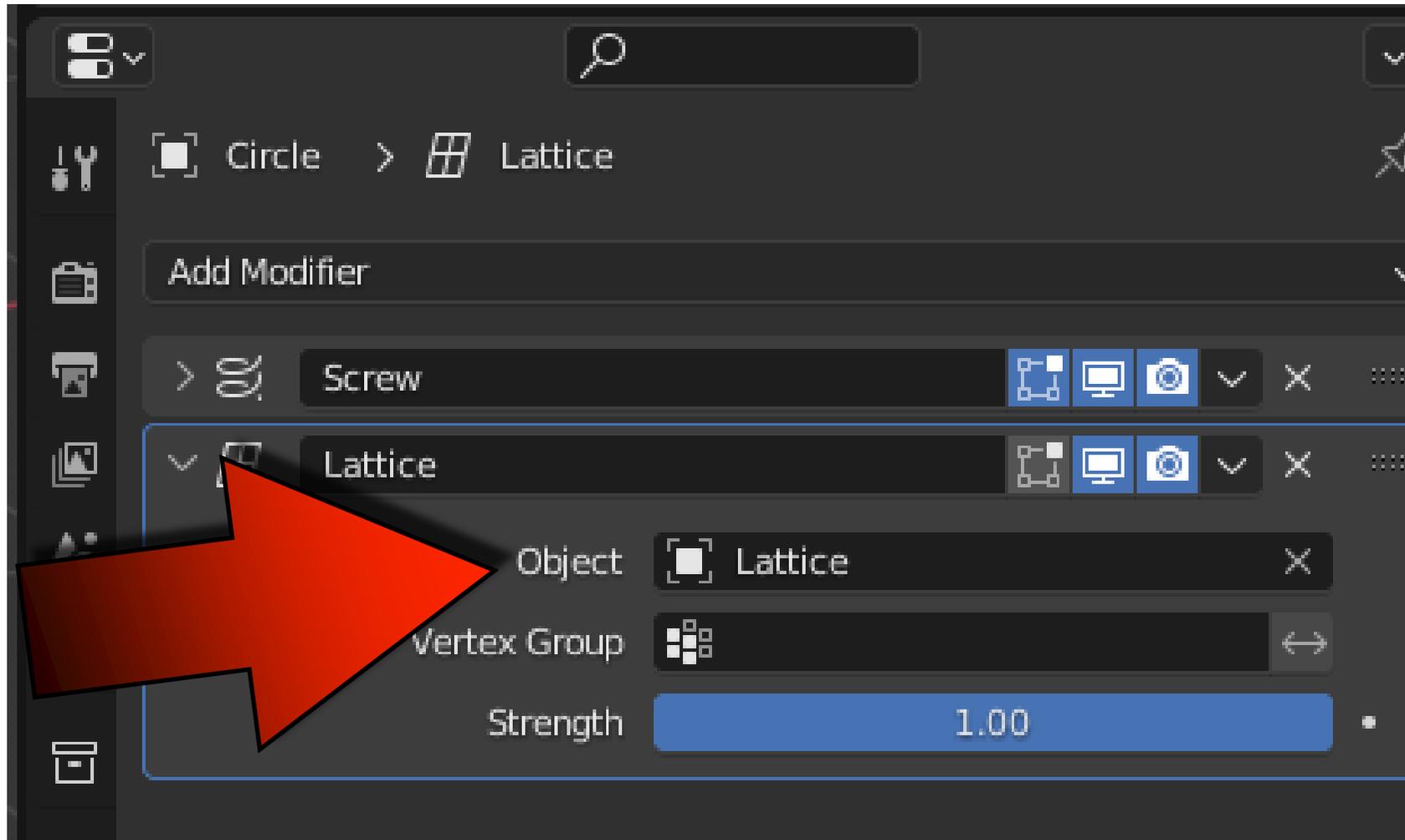
ADD LATTICE MODIFIER



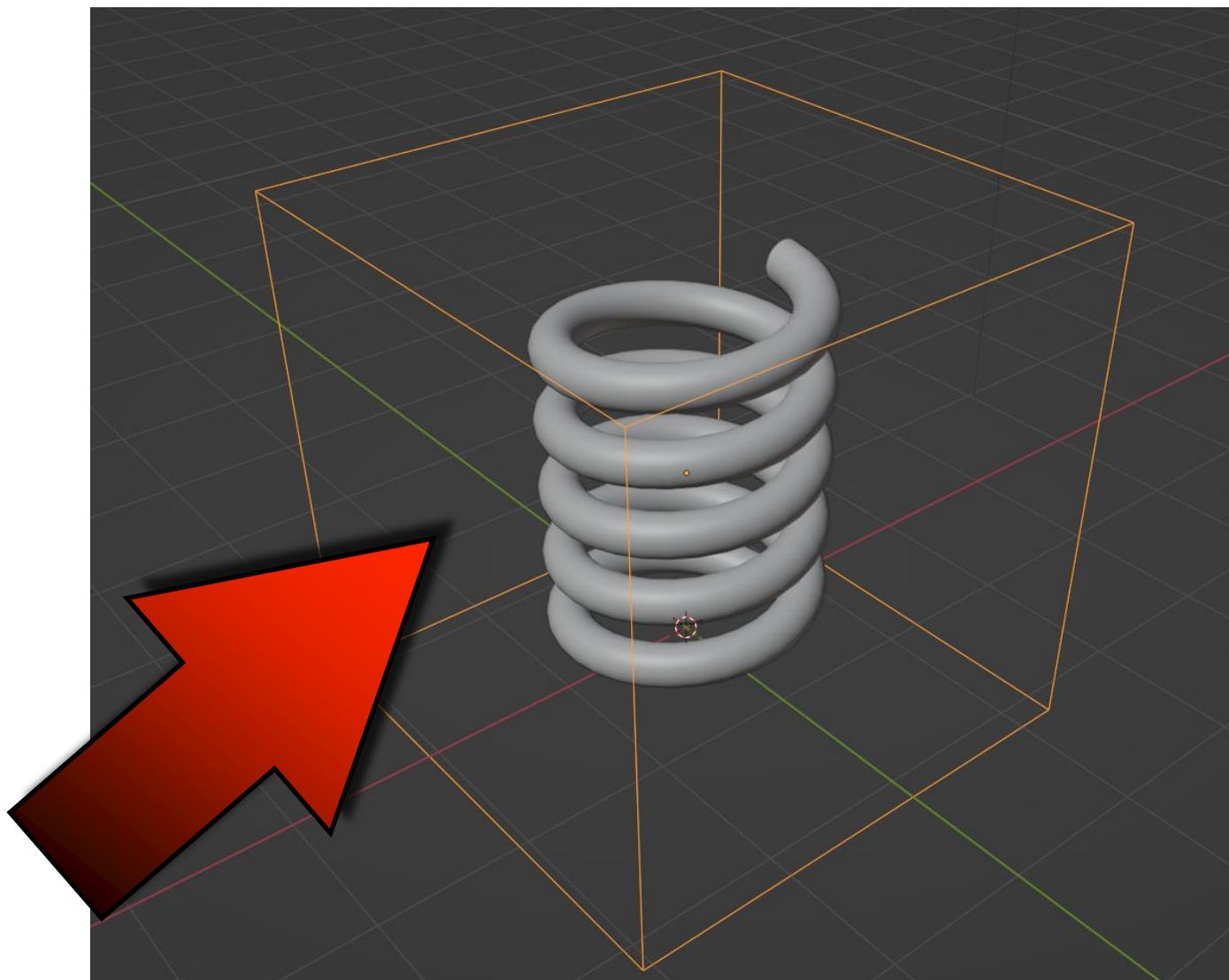
SPRING

POWER OF AR AND VR

CHOOSE LATTICE IN THE OBJECT WINDOW



SELECT **LATTICE**

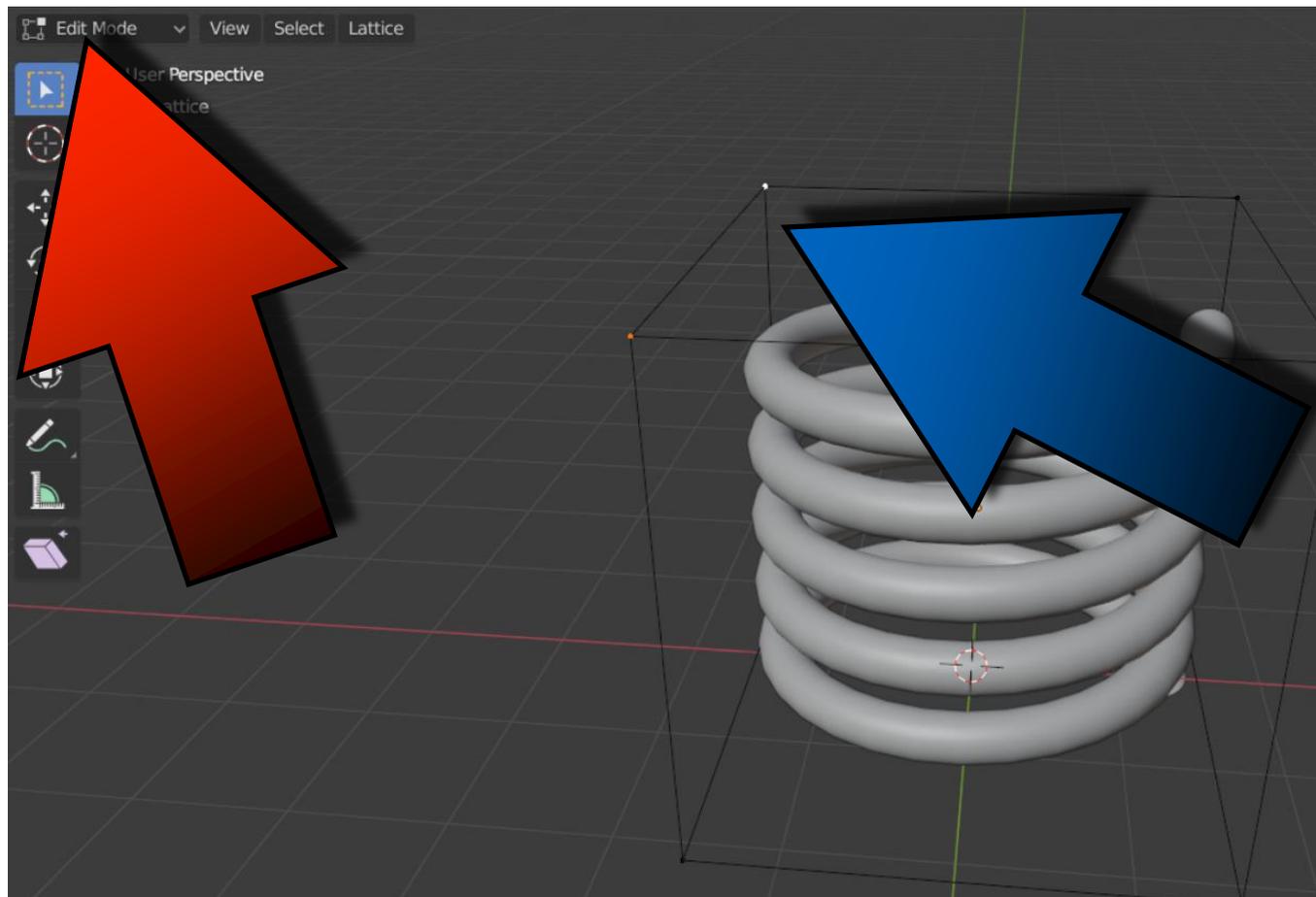


SPRING

POWER OF AR AND VR

FOR **LATTICE**

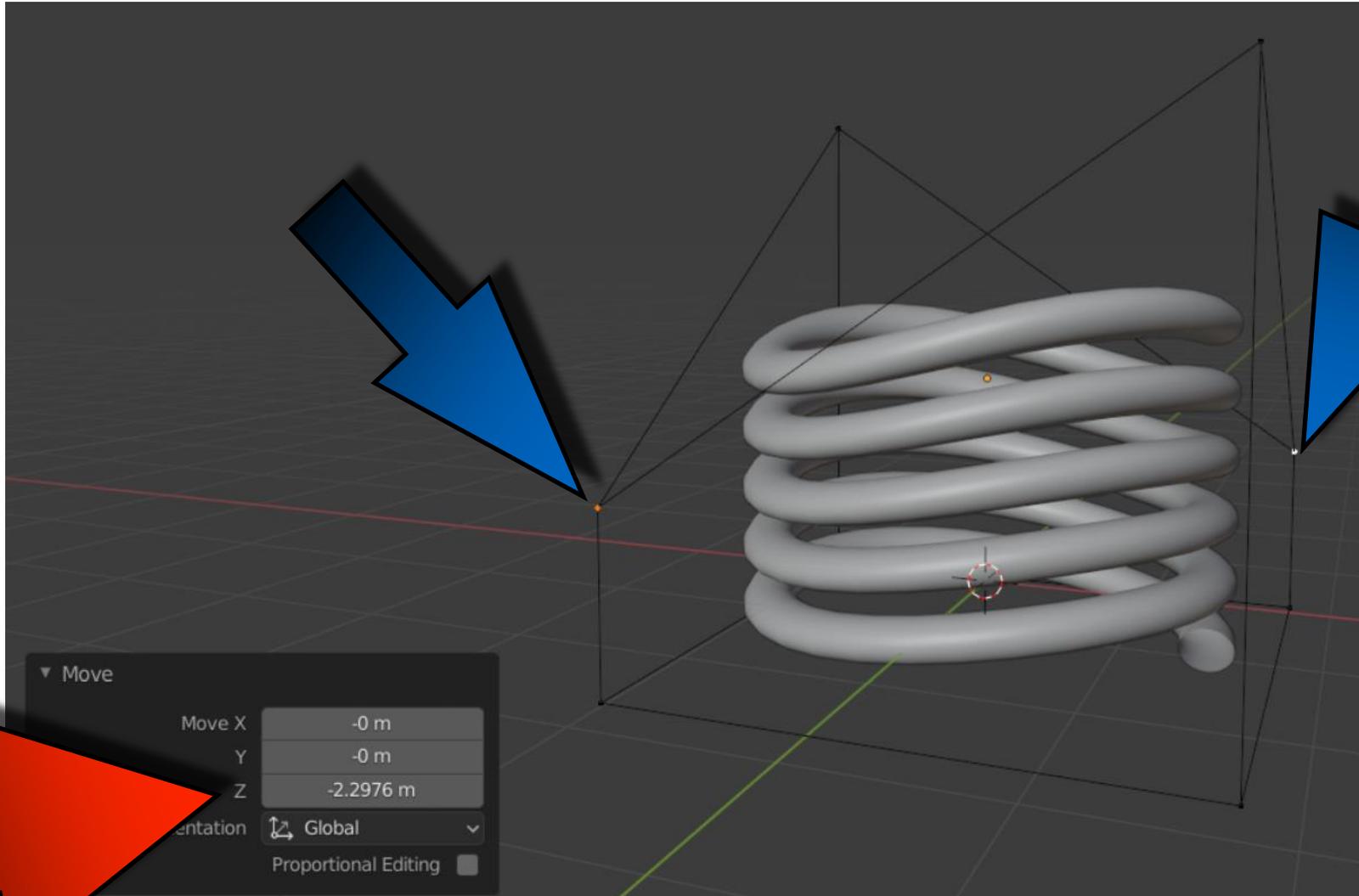
ENTER **EDIT MODE**



SPRING

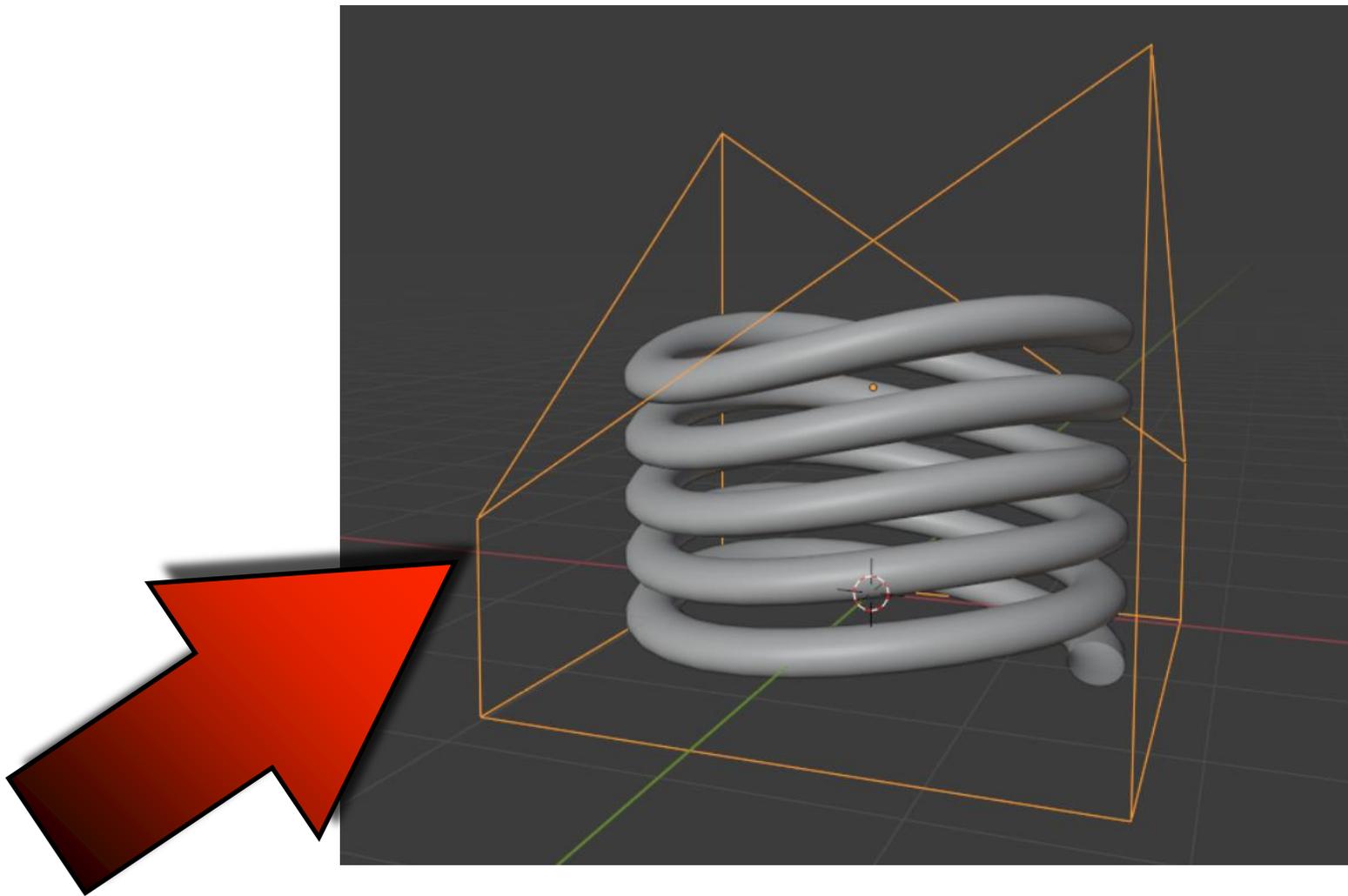
MARK AND MOVE

THE TWO EXTERNAL VERTEX ALONG THE Z-AXIS



SPRING

GO TO OBJECT MODE

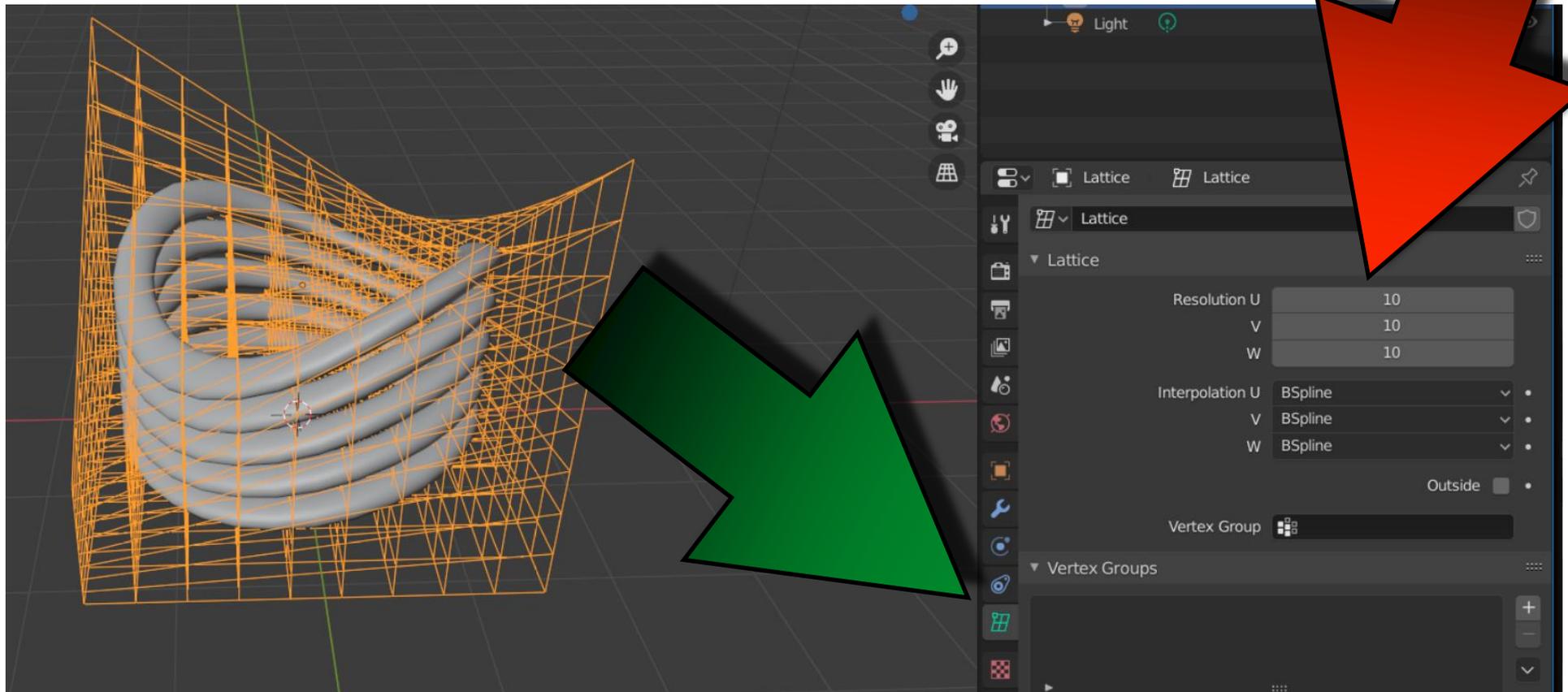


SPRING

POWER OF AR AND VR

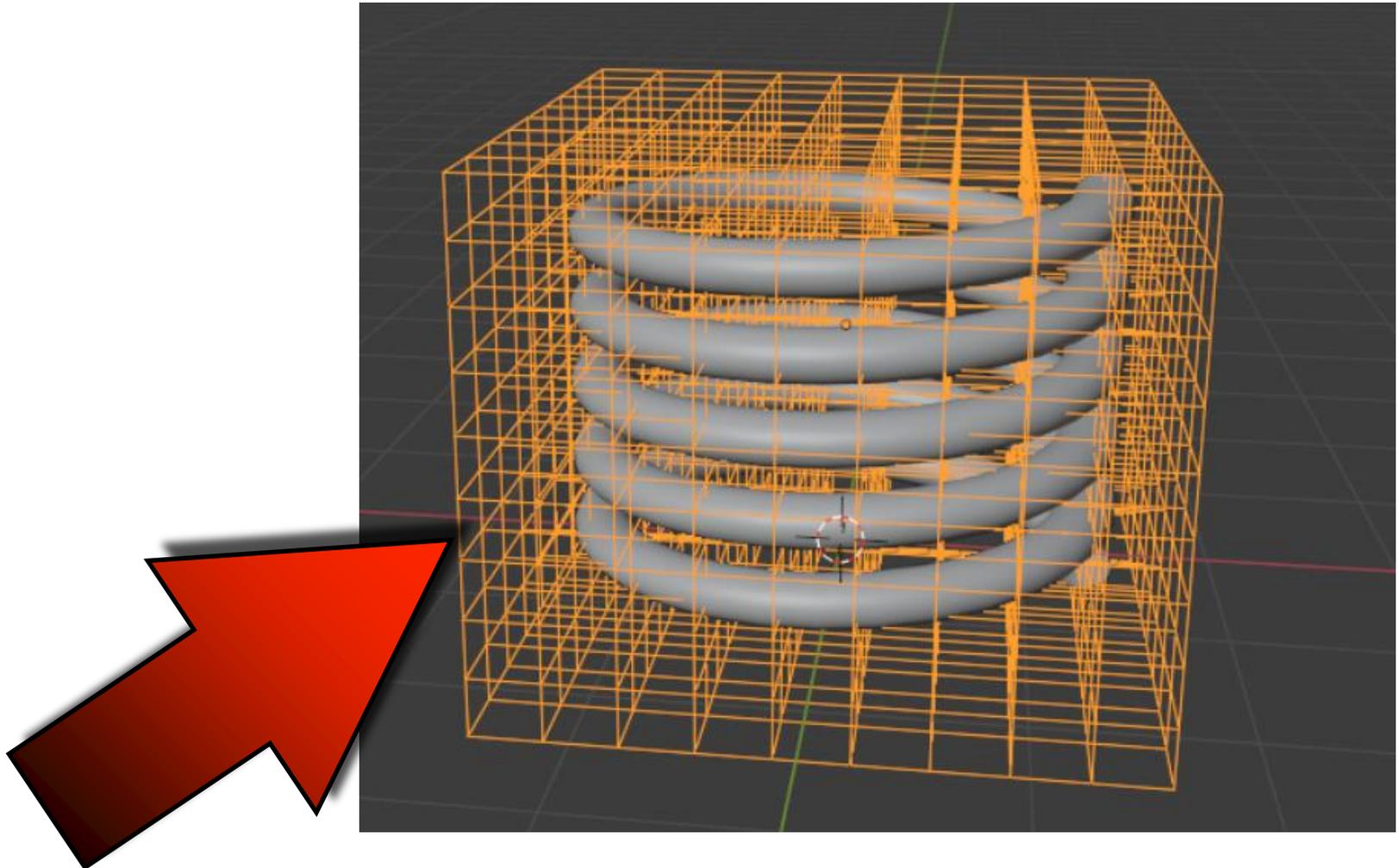
IN THE LATTICE TAB

CHANGE RESOLUTION U, V, W = 10



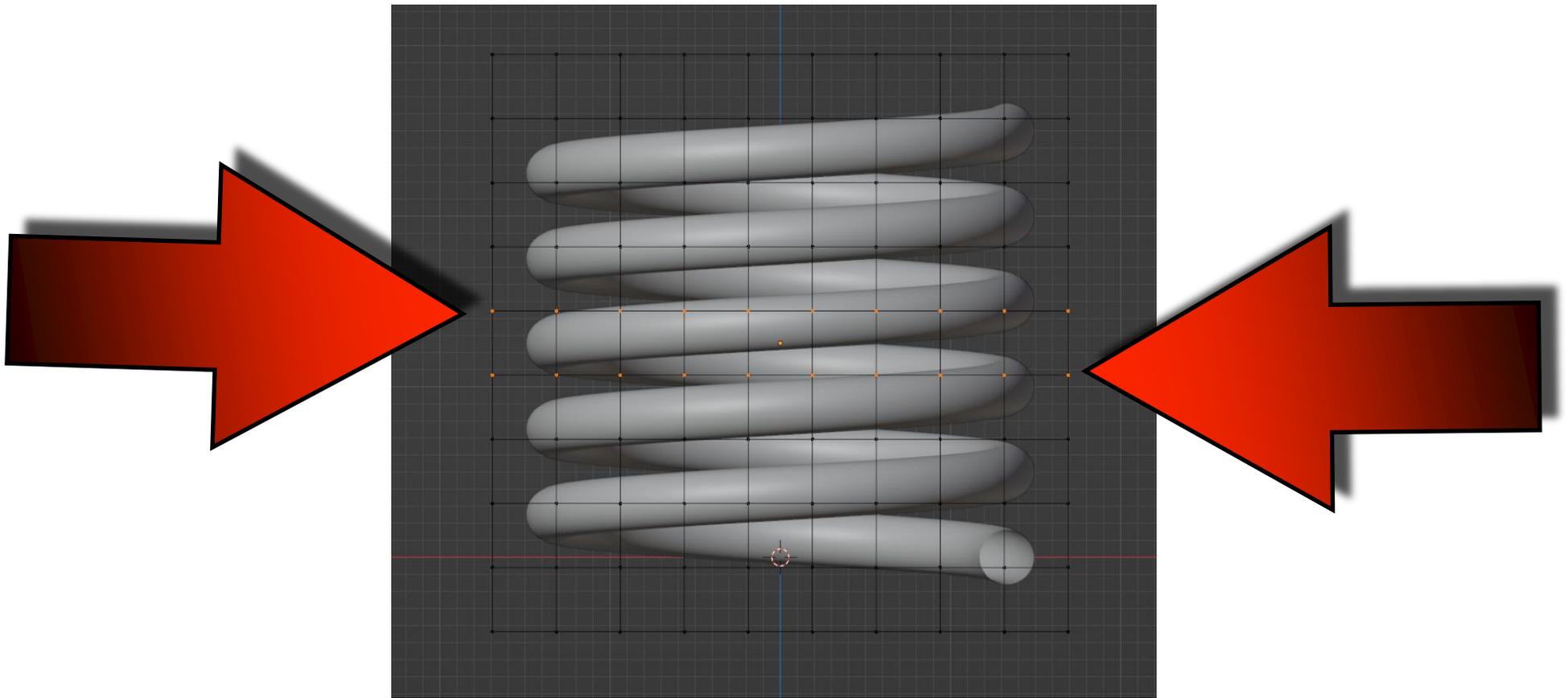
SPRING

CREATE A MODEL AS IN THE DRAWING



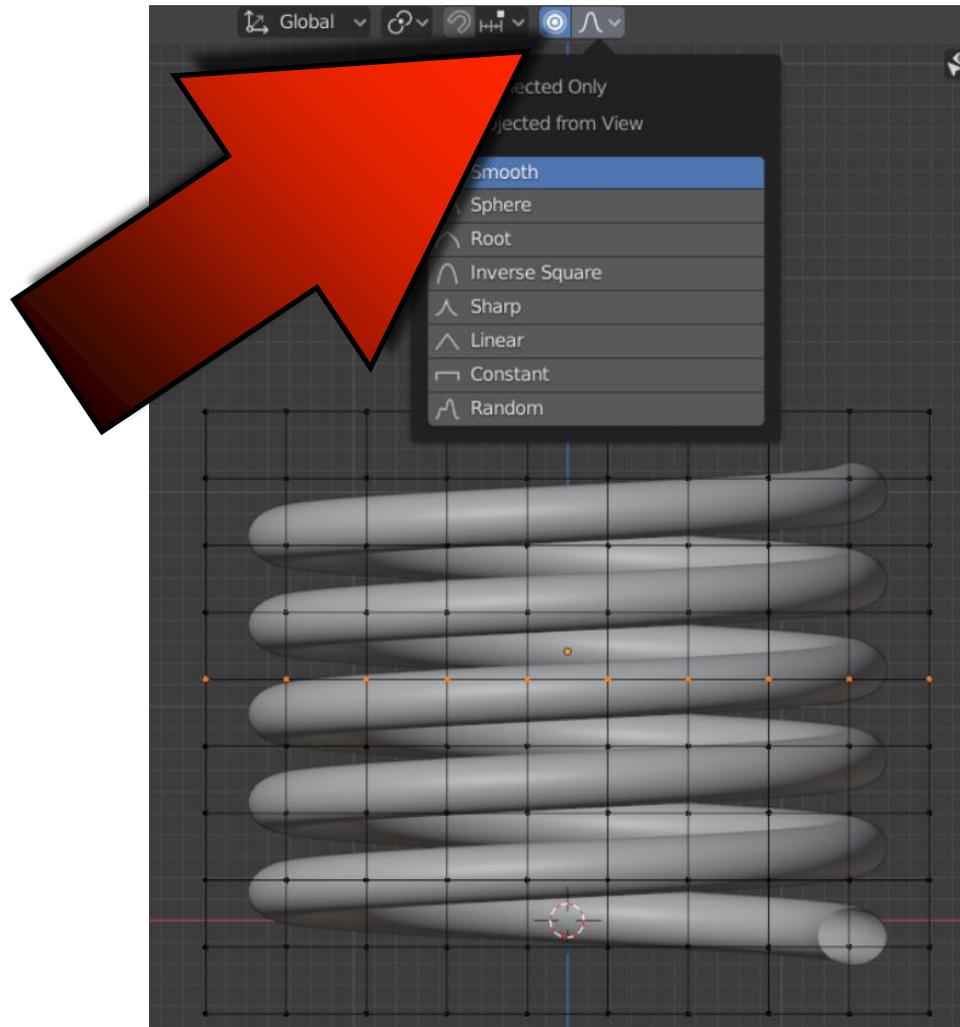
SPRING

MARK **THE MIDDLE VERTEX** IN **THE EDIT MODE**



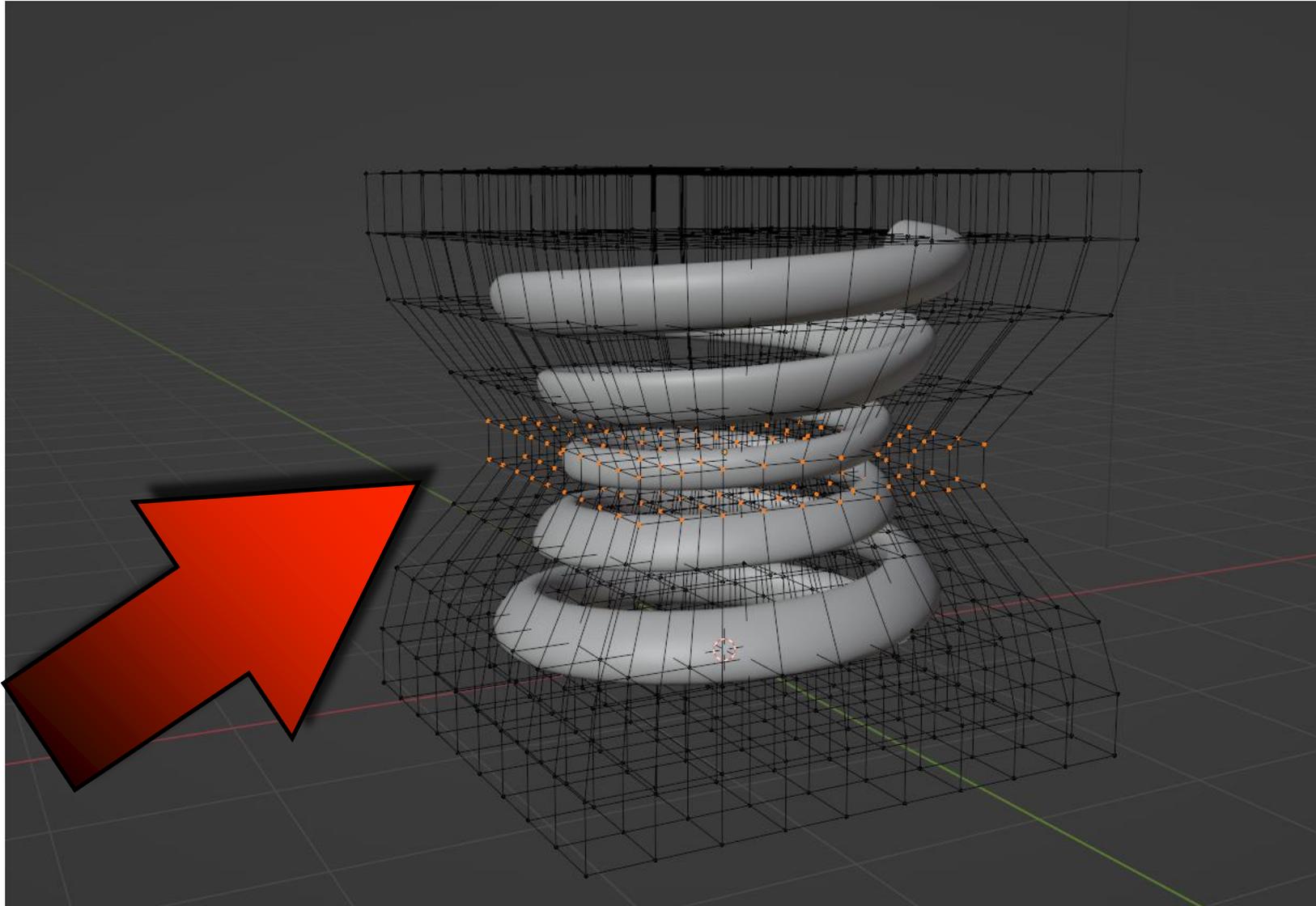
SPRING

TURN ON PROPORTIONAL EDITION



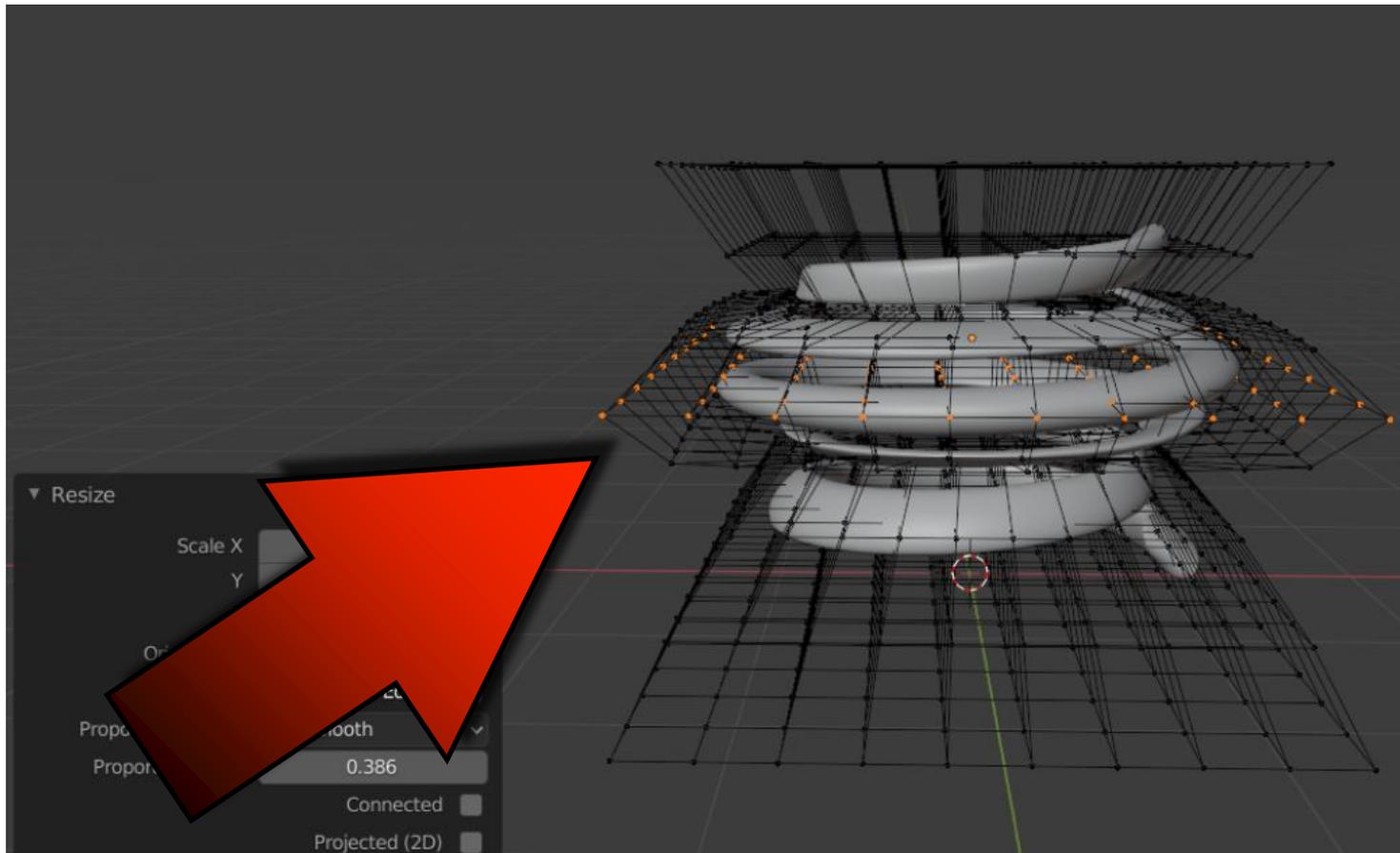
SPRING

SCALE PROPERLY



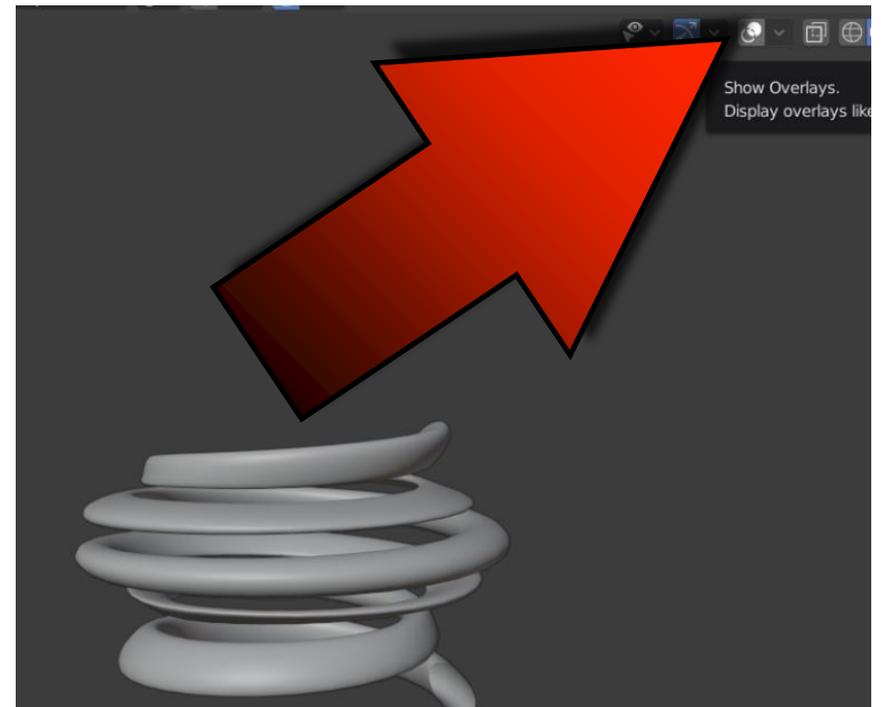
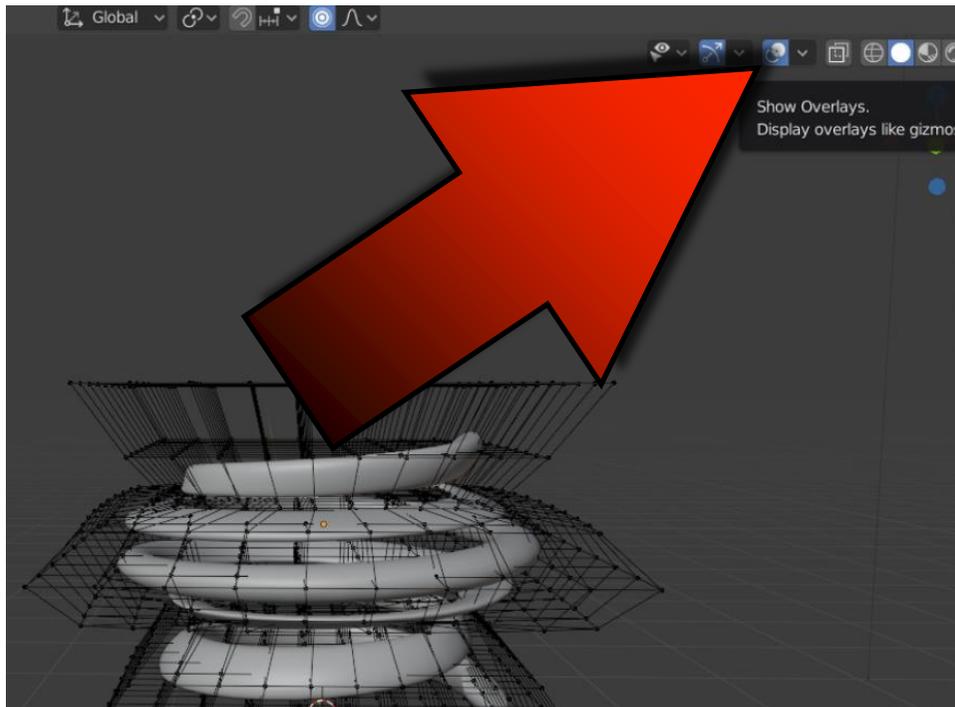
SPRING

WE CAN FREELY MODEL THE MESH



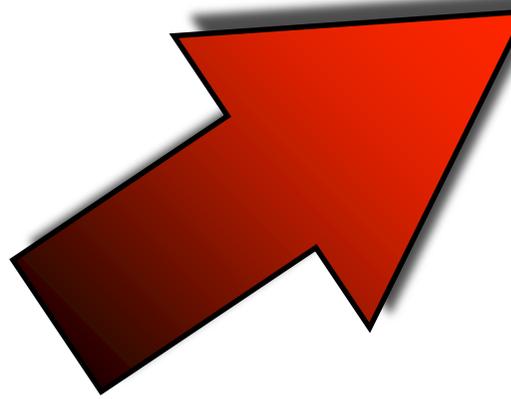
SPRING

TURN OFF **OVERLAYS**



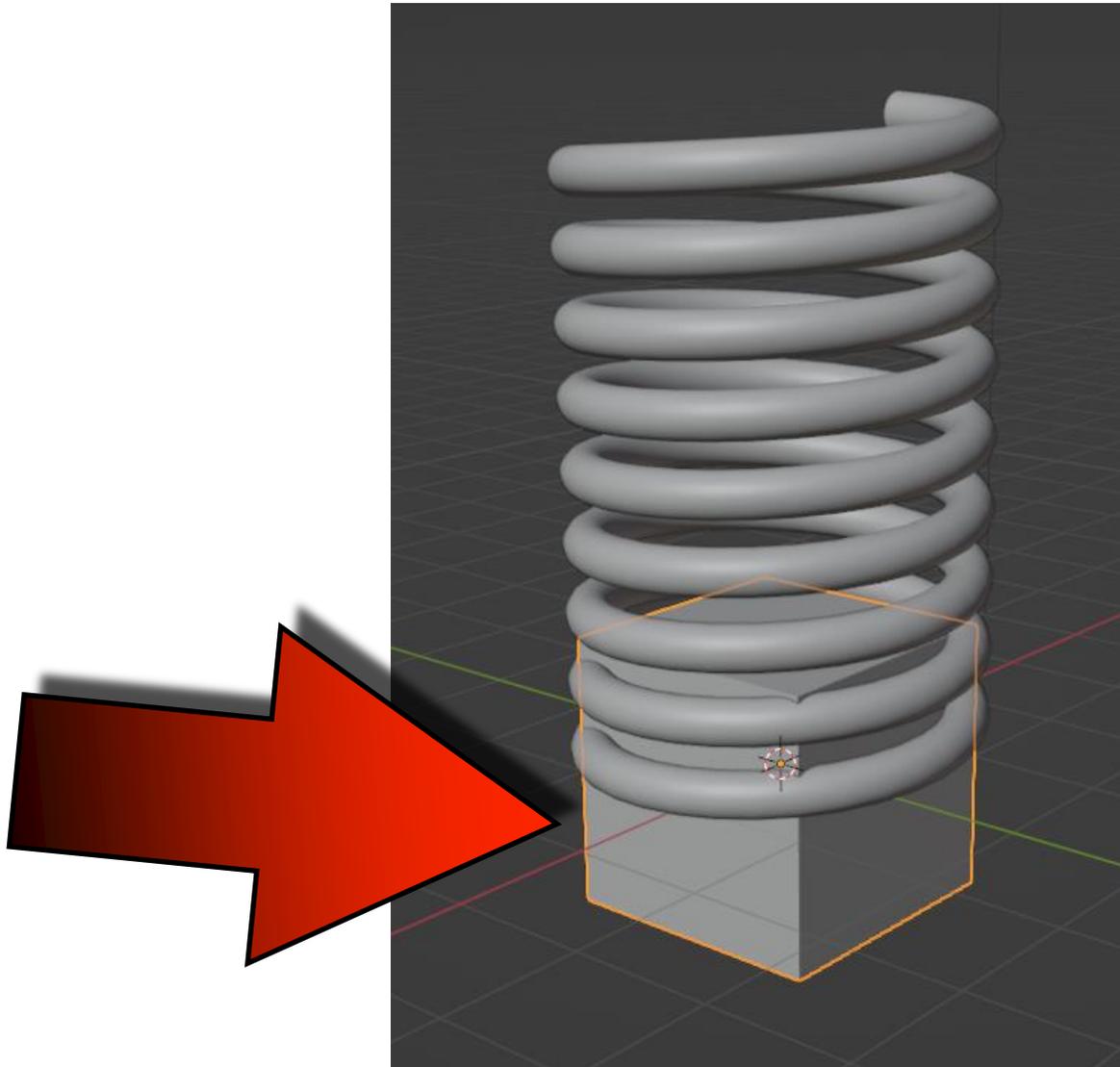
SPRING

CREATE A **SPRING** LIKE THIS



SPRING

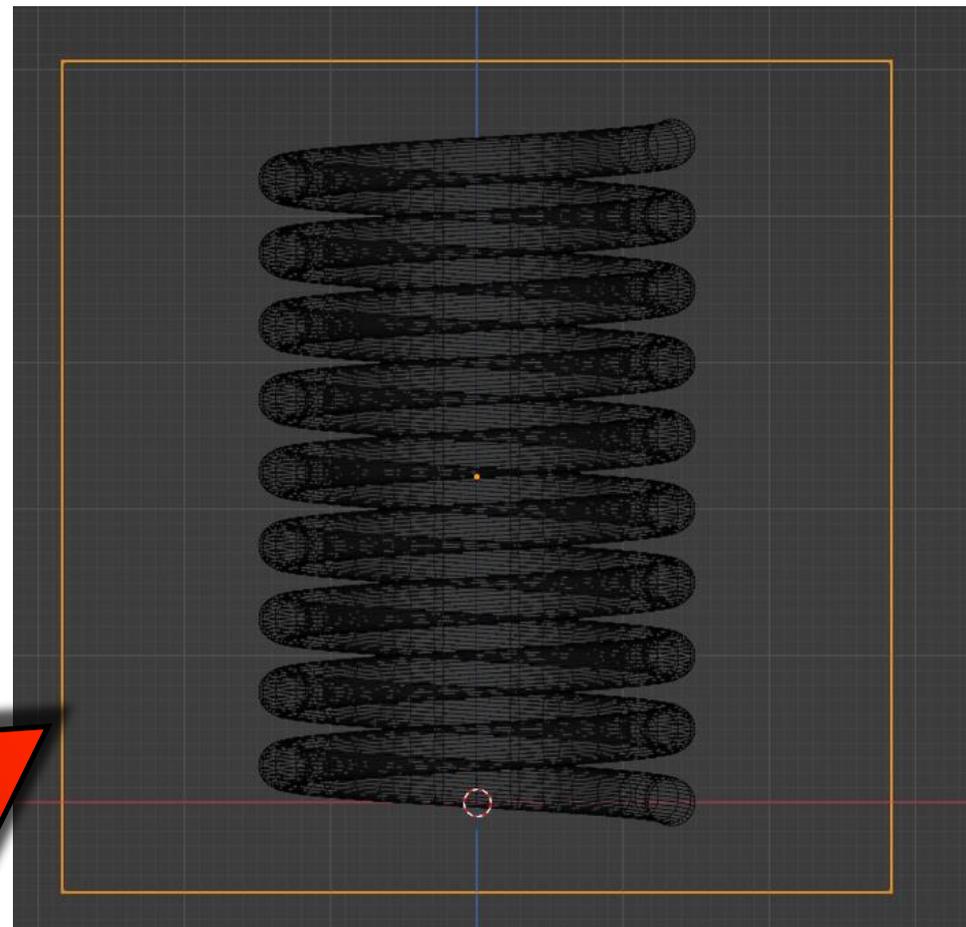
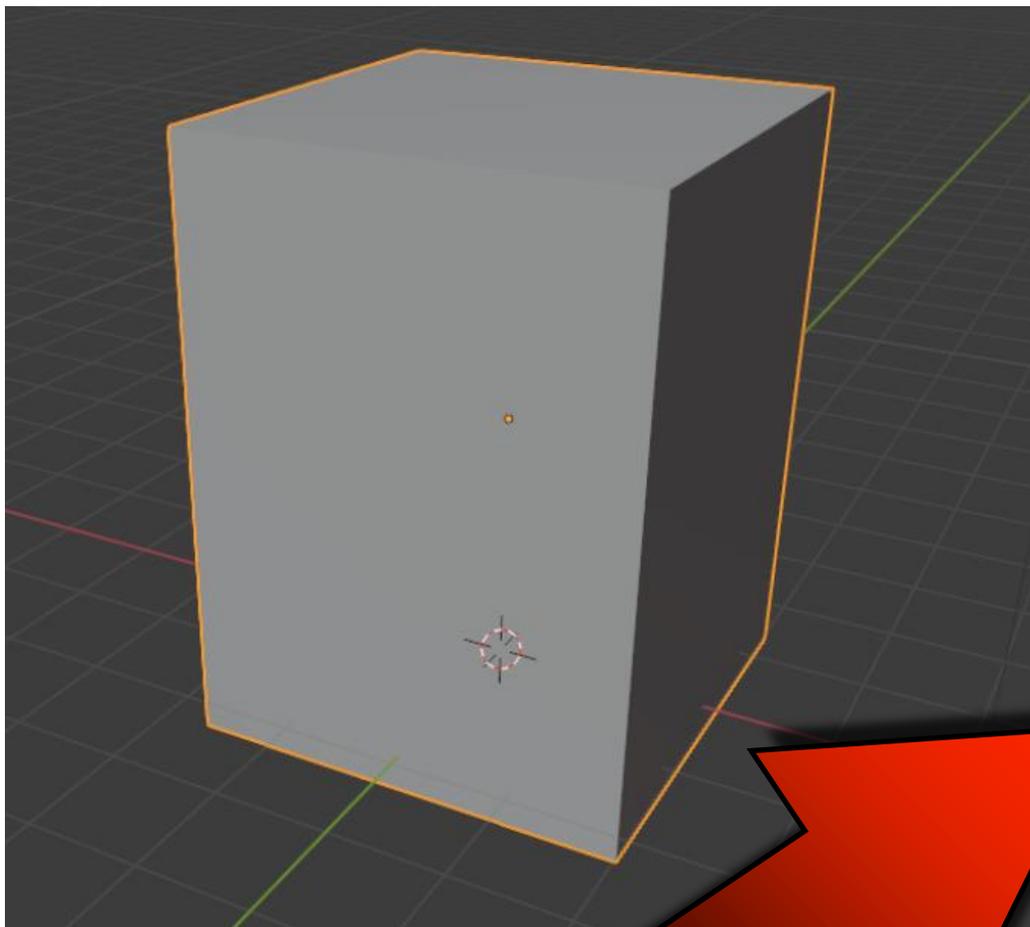
INSERT CUBE



SPRING

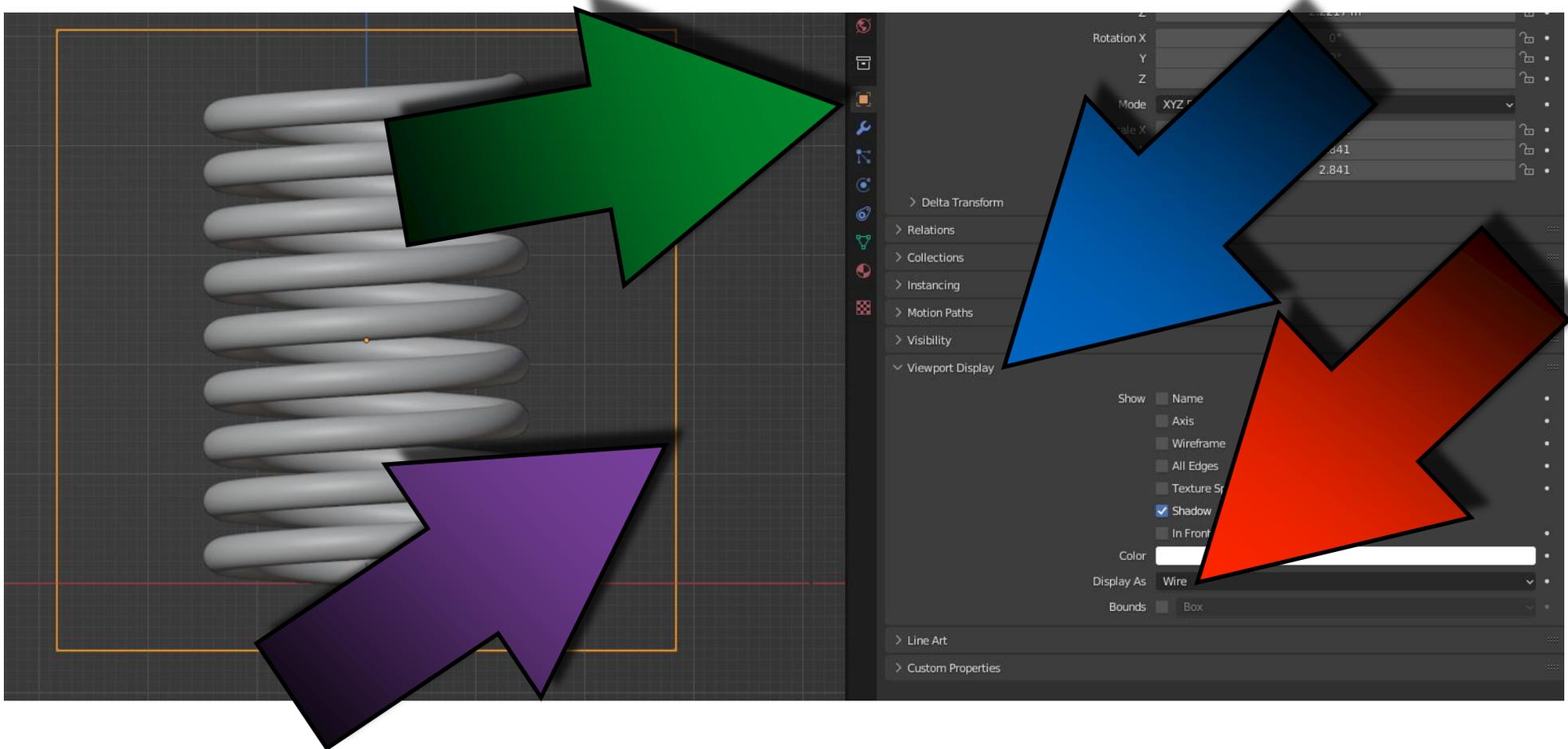
POWER OF AR AND VR

SCALE CUBE



SPRING

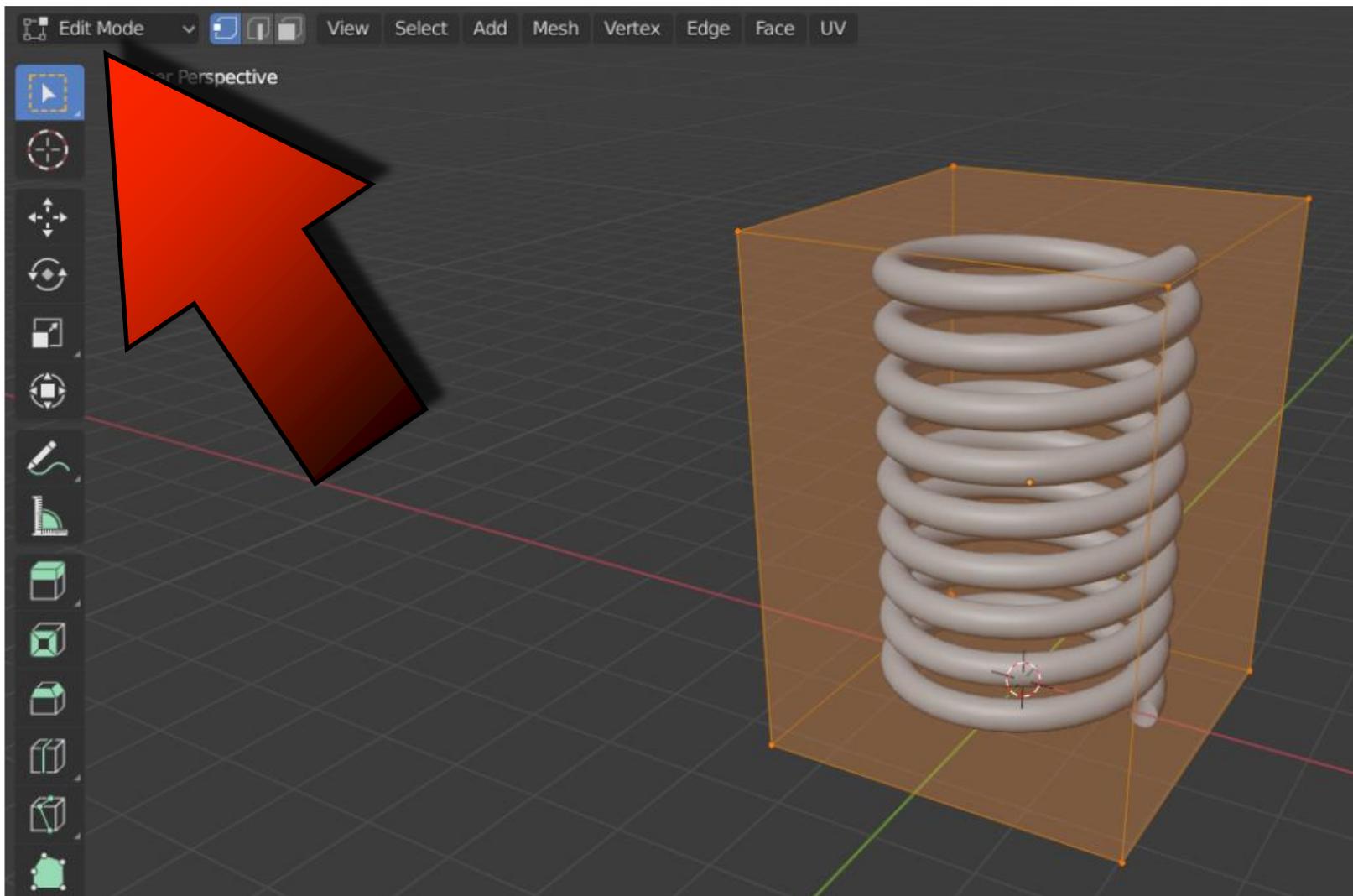
CHANGE DISPLAY FOR CUBE TO **WIRE**



SPRING

POWER OF AR AND VR

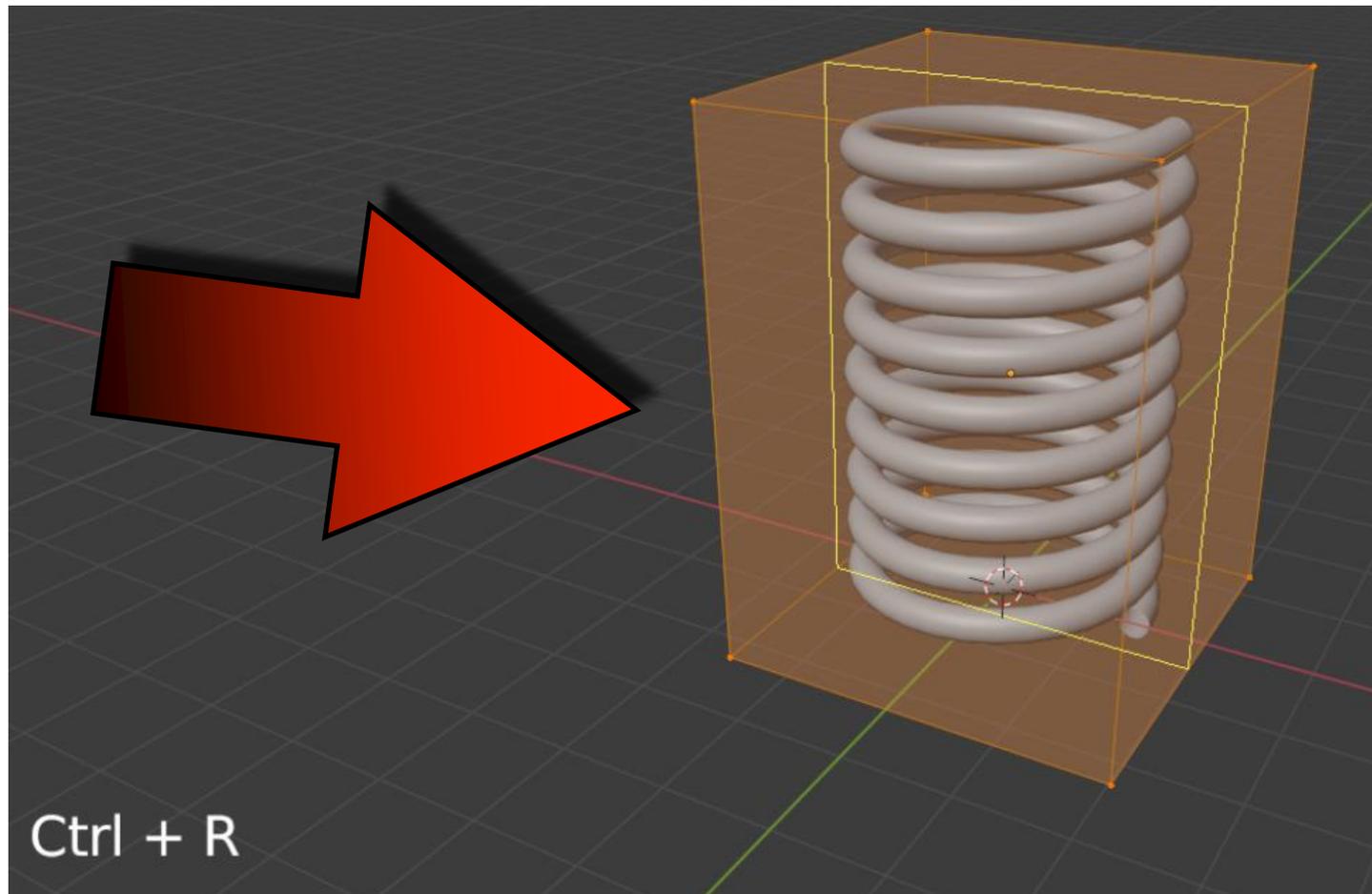
GO TO **EDIT MODE**



SPRING

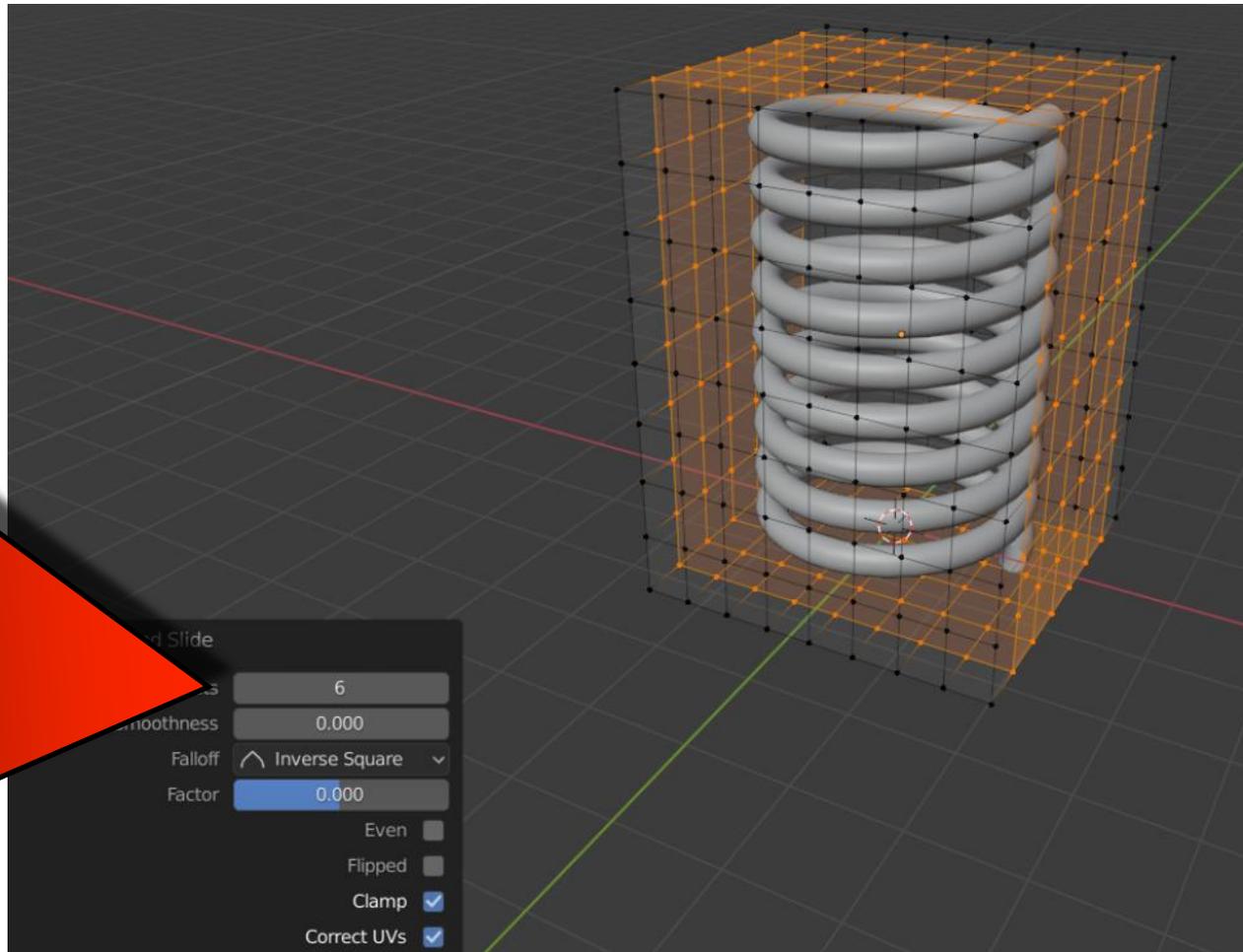
DIVIDE CUBE

CTRL+R — **AXIS** — **MIDDLE MOUSE** — **CLICK** — **ESCAPE**



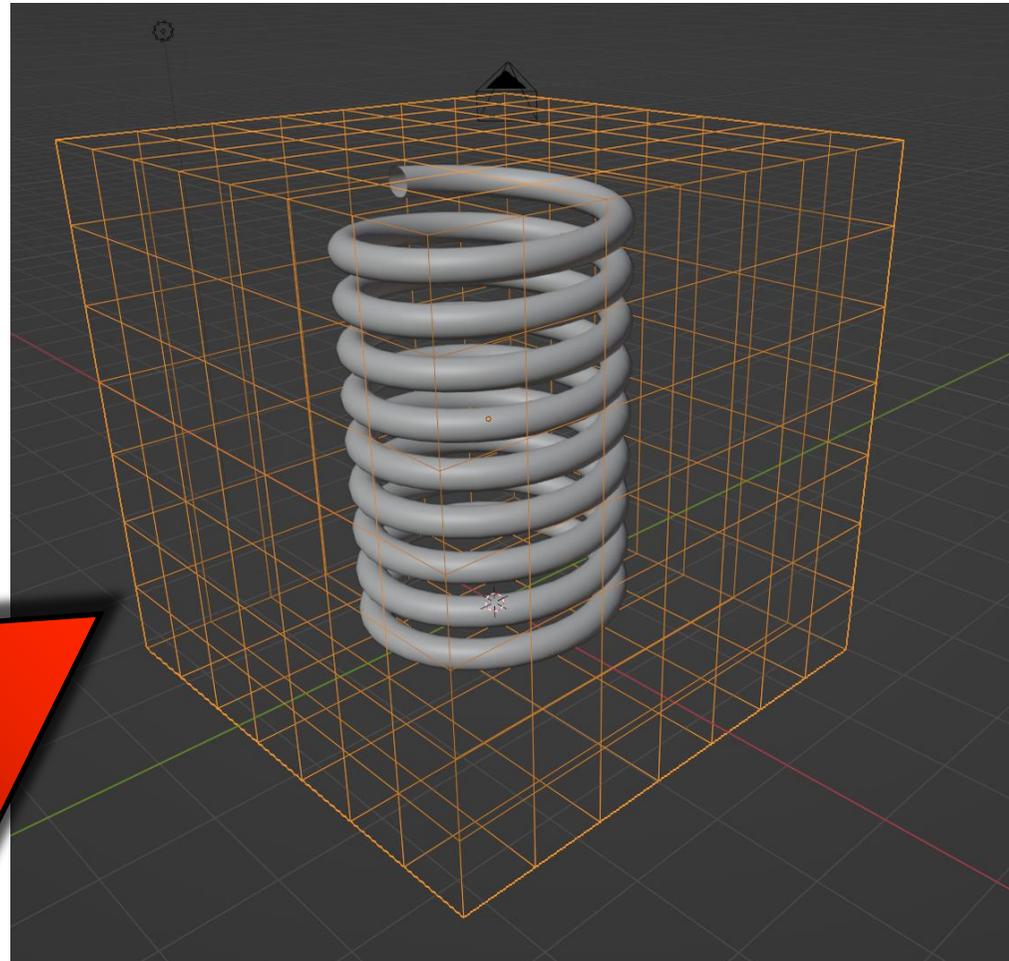
SPRING

NUMBER OF CUTS = 6



SPRING

GO TO **OBJECT MODE**



SPRING

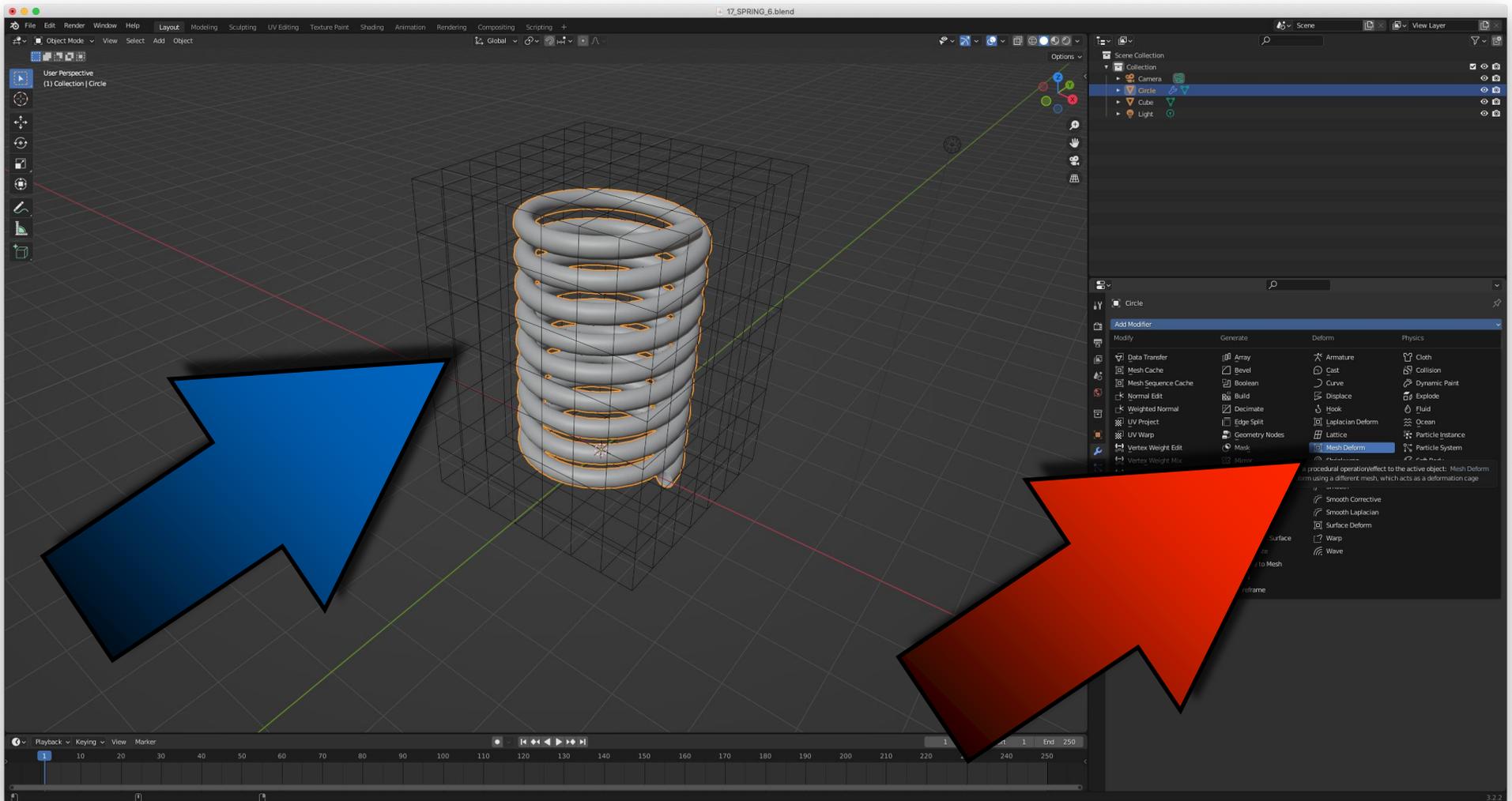


POWER OF AR AND VR



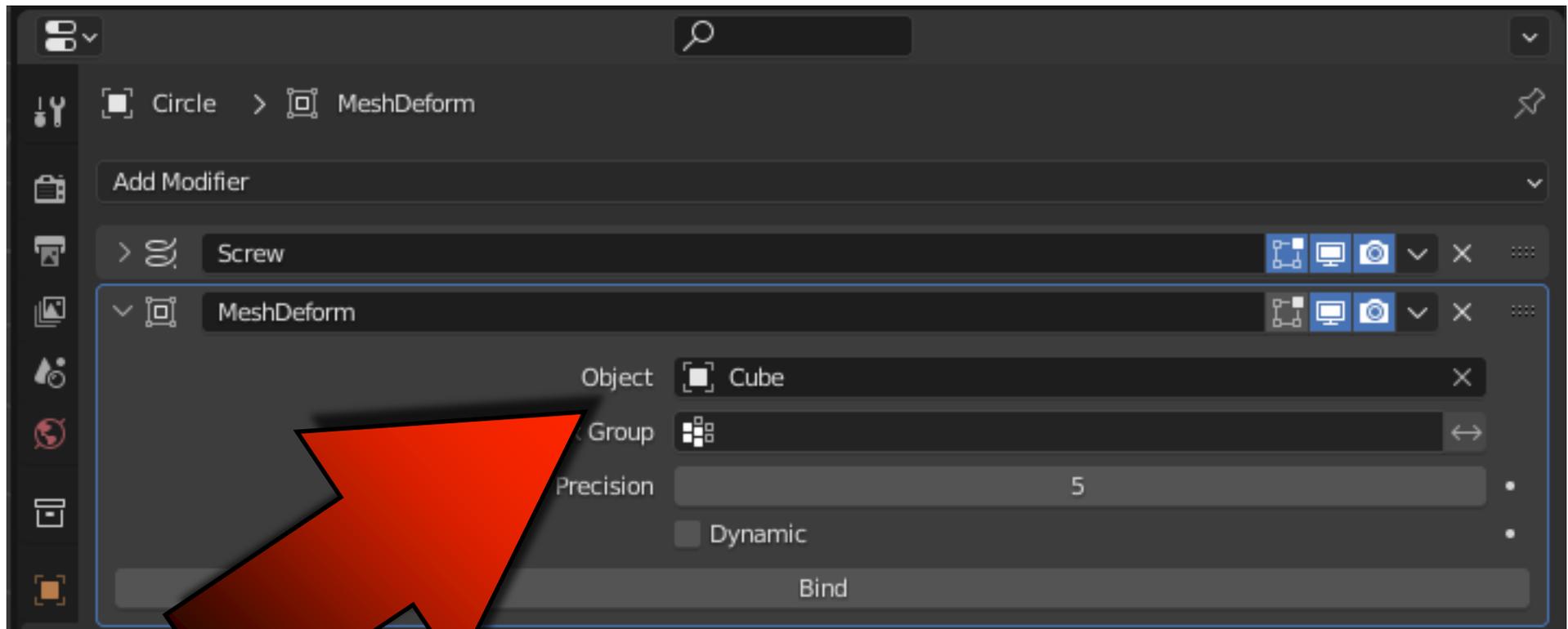
FOR SPRING

ADD MESH DEFORM MODIFIER



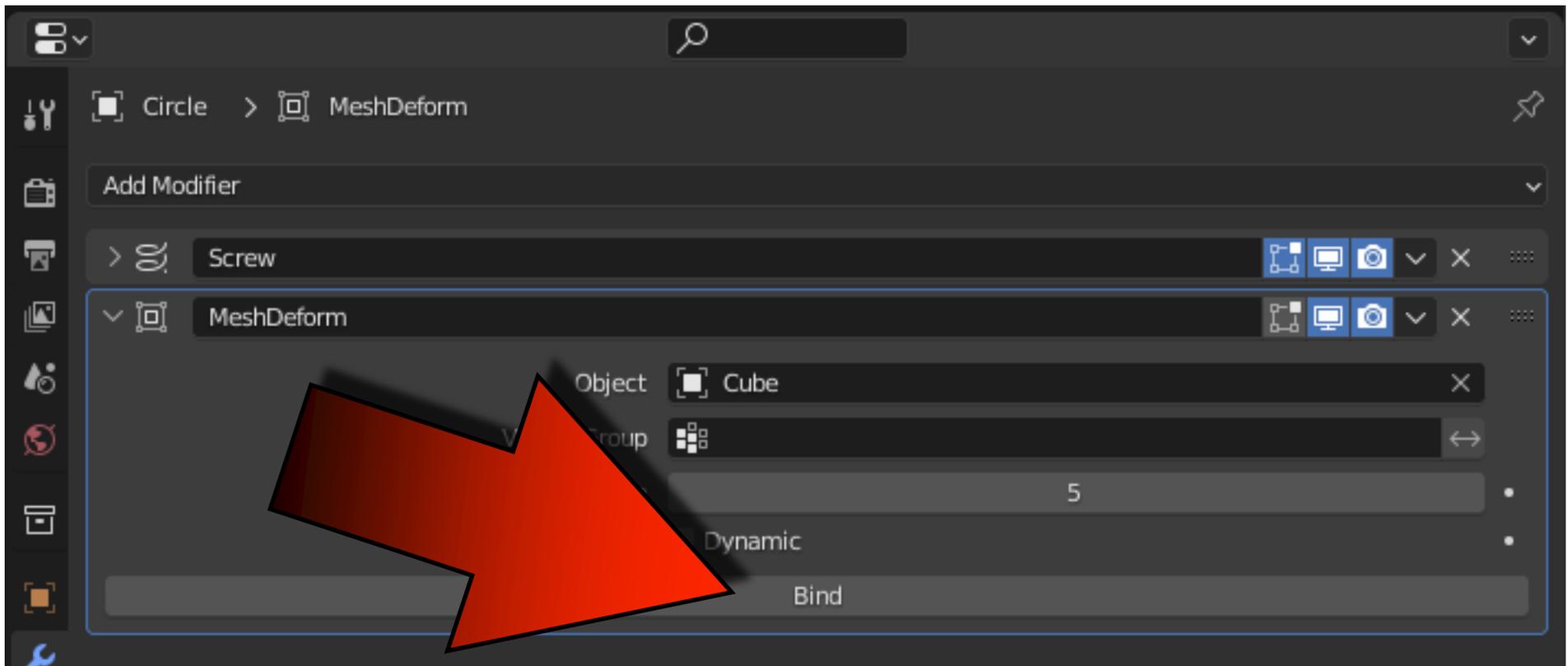
SPRING

FOR OBJECT CHOOSE CUBE



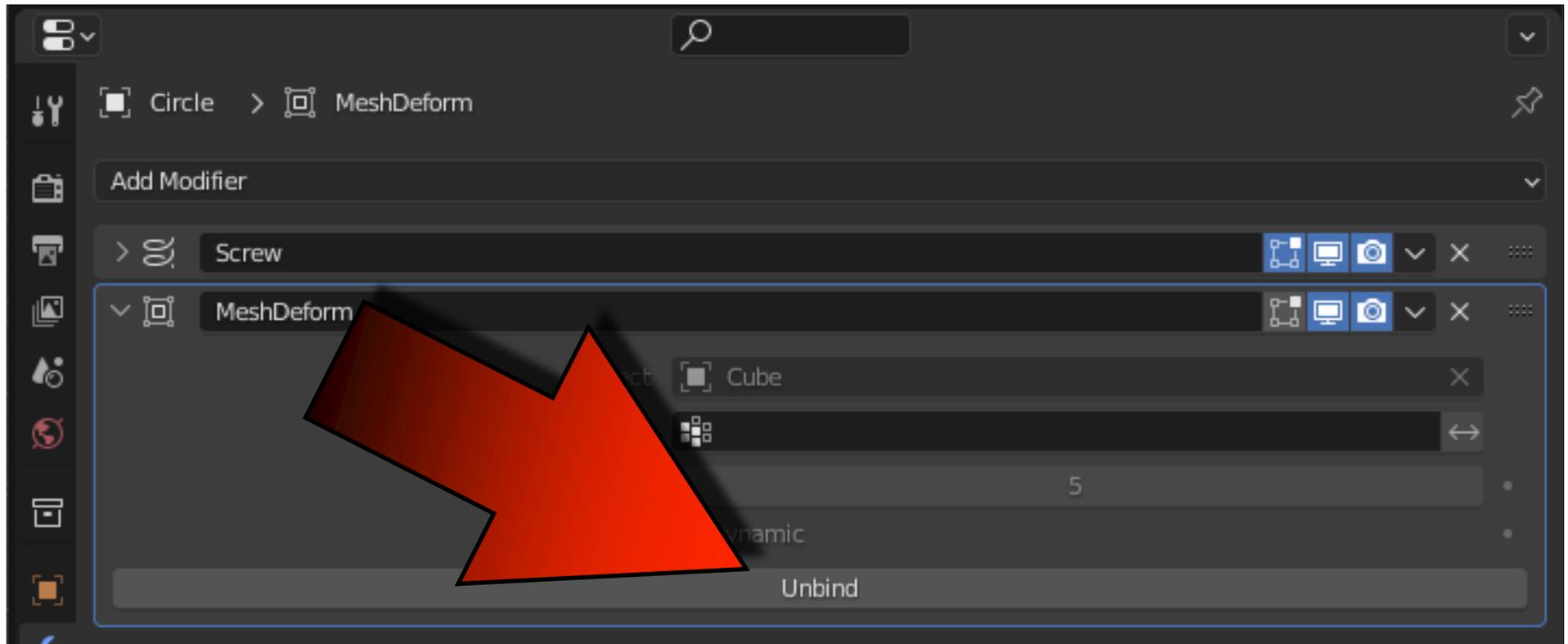
SPRING

CLICK ON **BIND** AND WAIT FOR A MOMENT



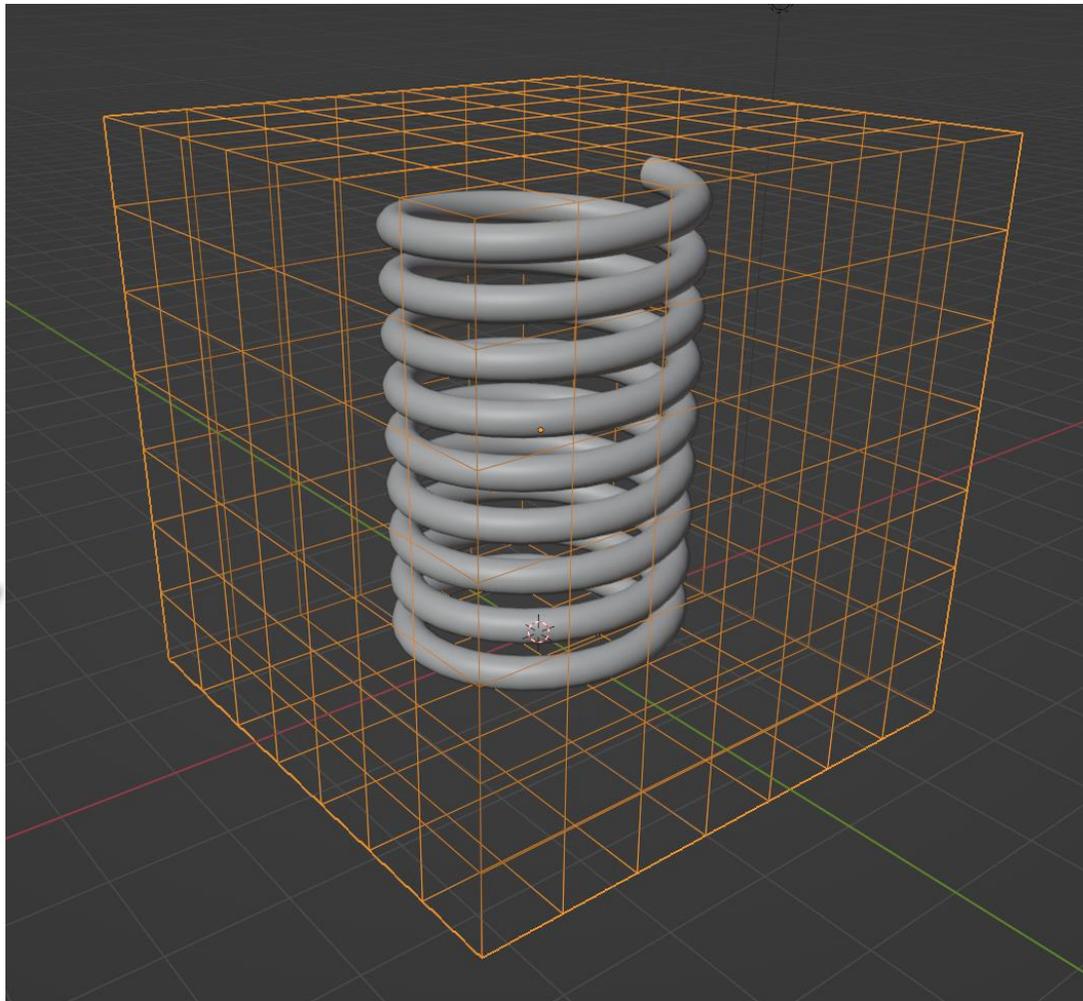
SPRING

AFTER A WHILE YOU WILL SEE **UNBIND**



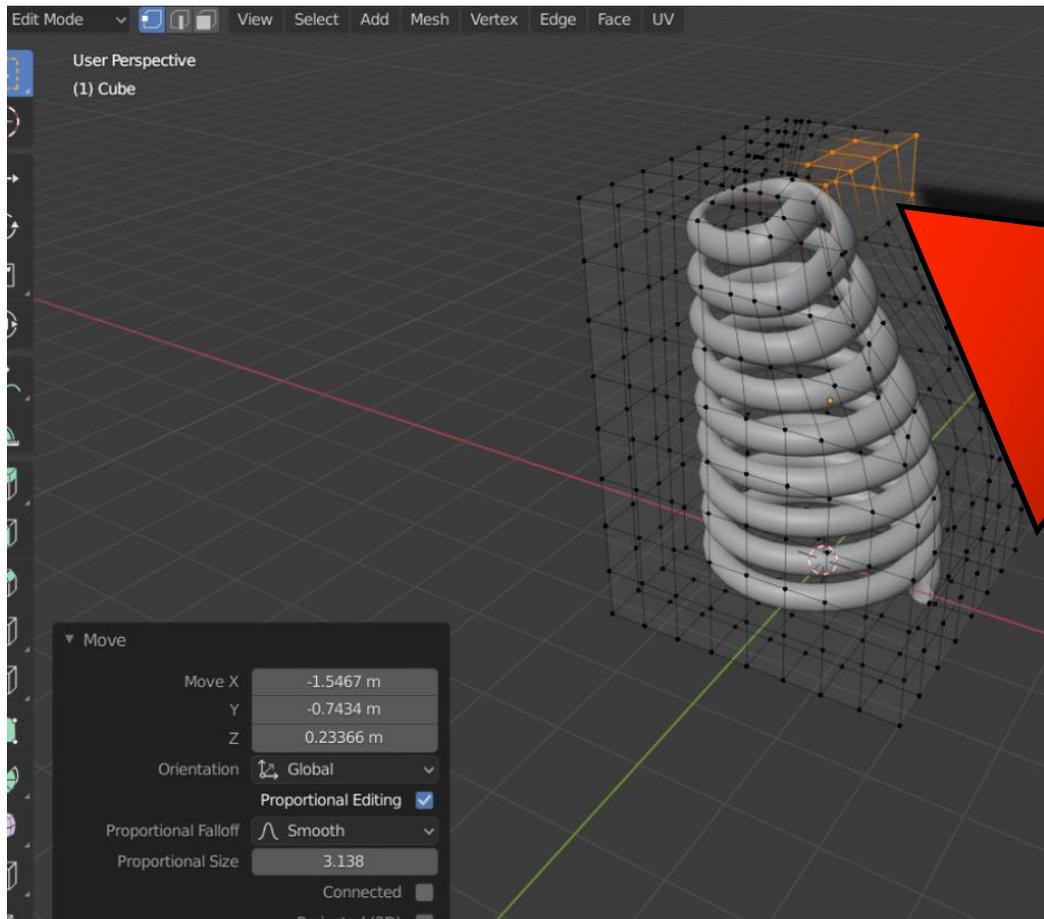
SPRING

SELECT **CUBE** AND GO TO **EDIT MODE**



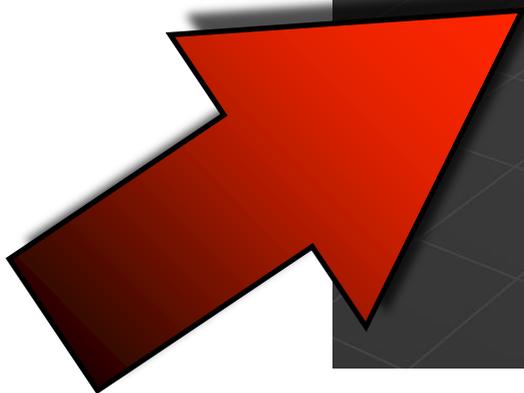
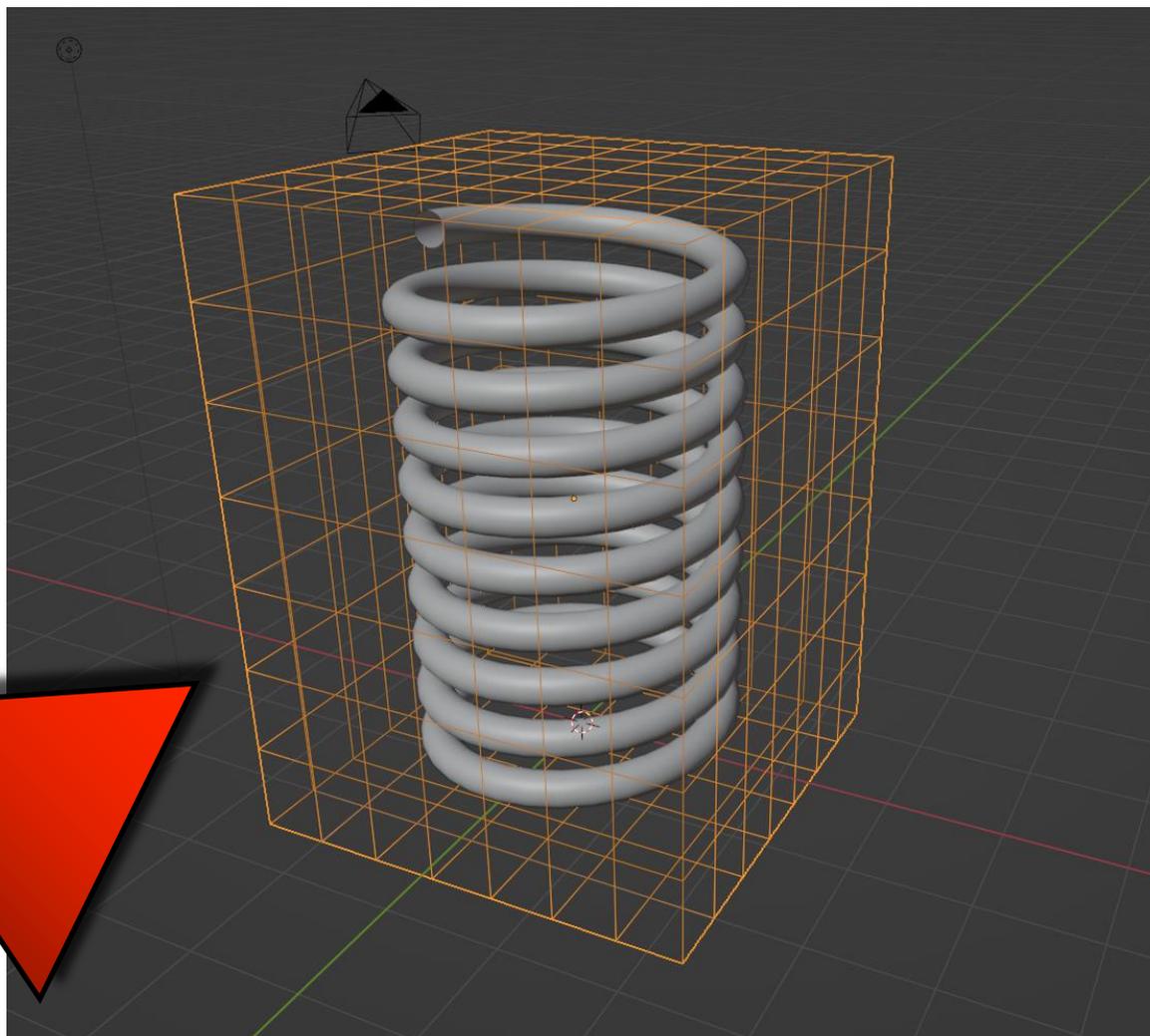
SPRING

IN EDIT MODE YOU CAN MODIFY THE CUBE



SPRING

CREATE A **SPRING** LIKE THIS

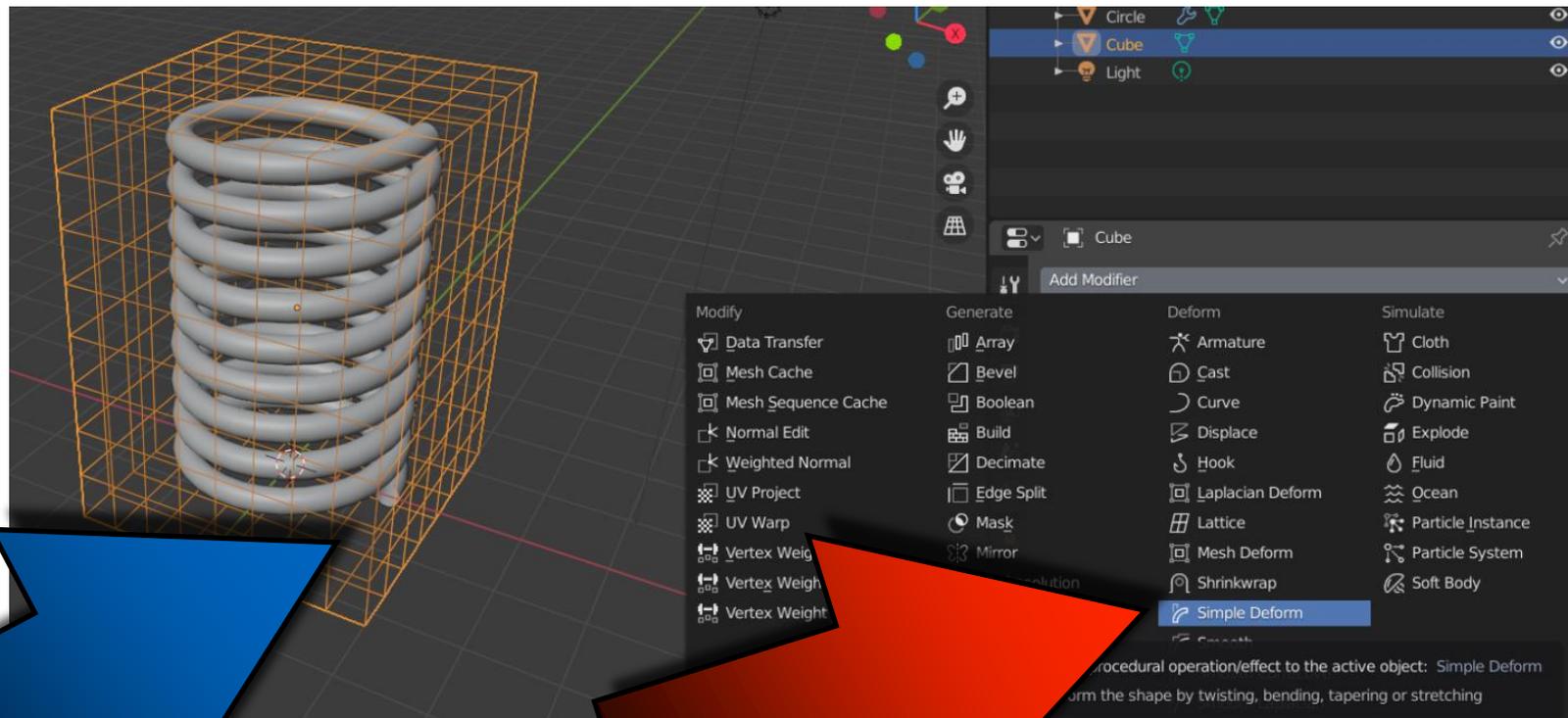


SPRING

POWER OF AR AND VR

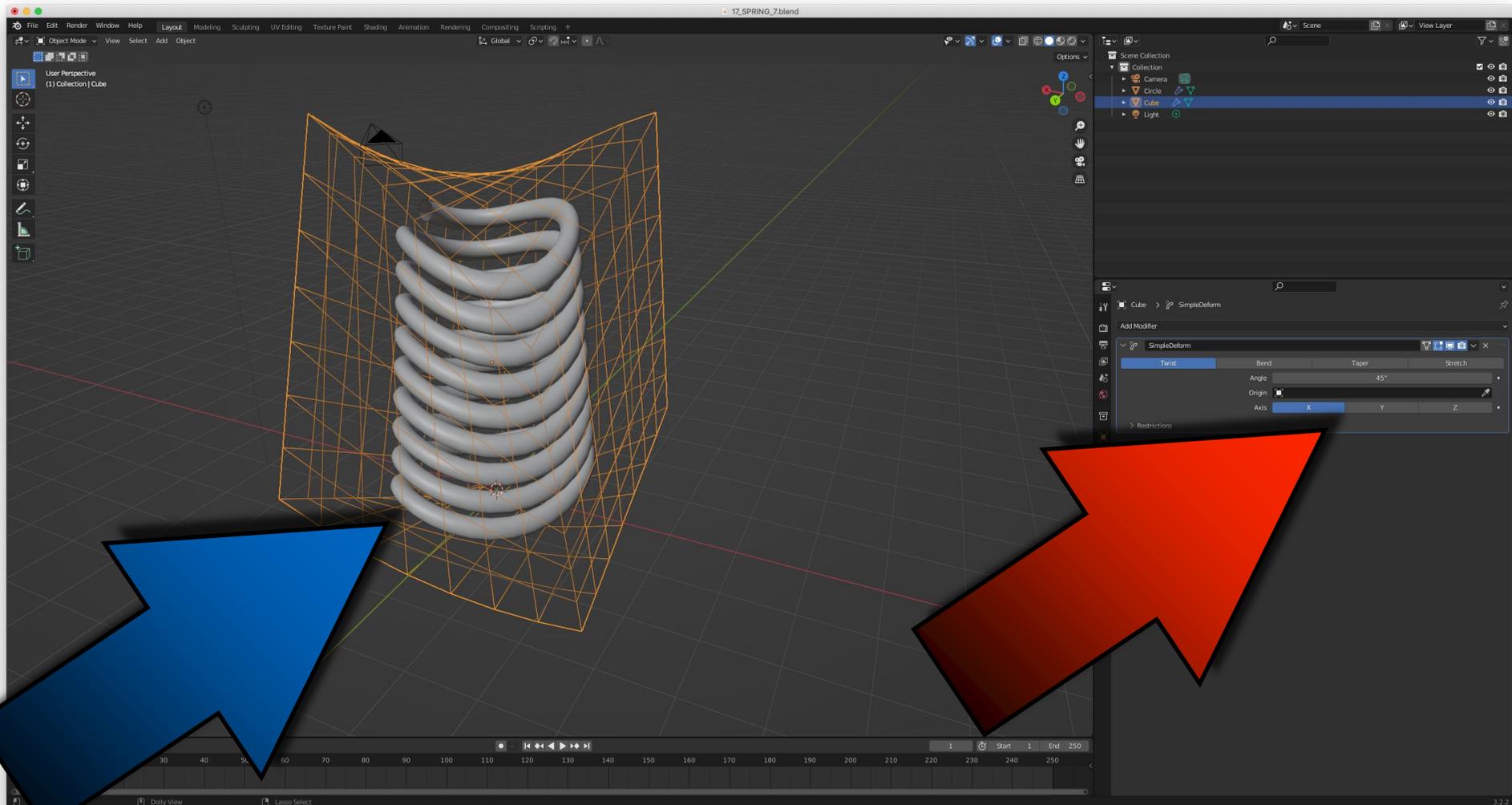
FOR CUBE ADD

SIMPLE DEFORM MODIFIER



SPRING

YOU CAN CHANGE THE DEFORMATIONS ALONG THE AXES X, Y, Z



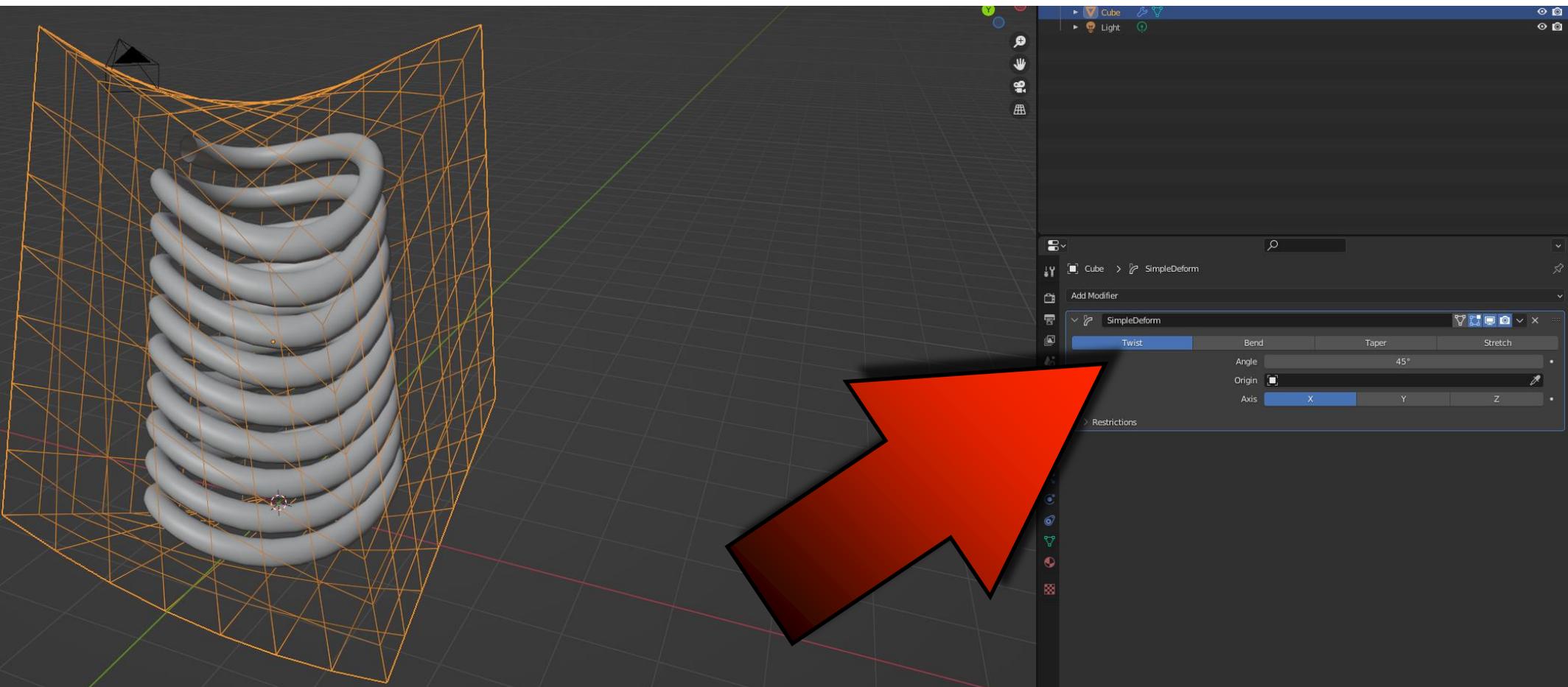
SPRING



POWER OF AR AND VR

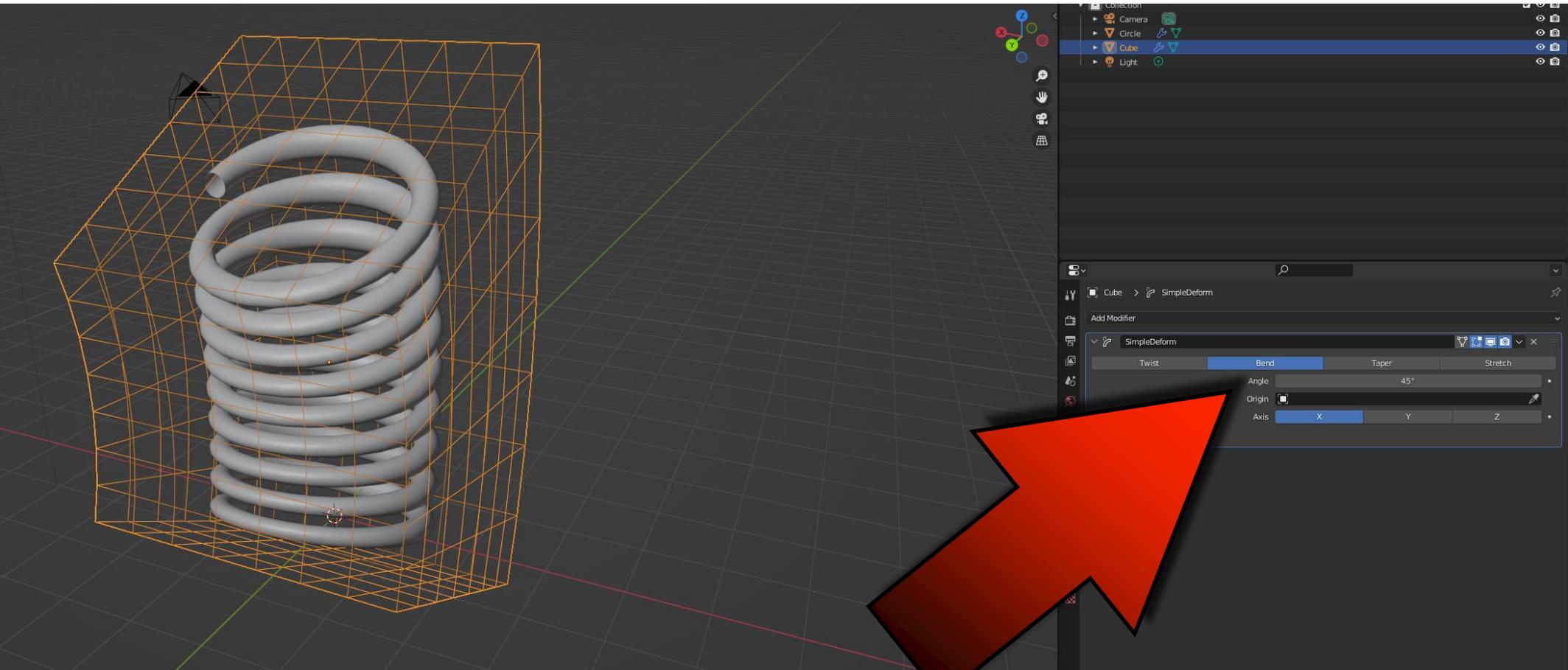


CLICK ON **TWIST**



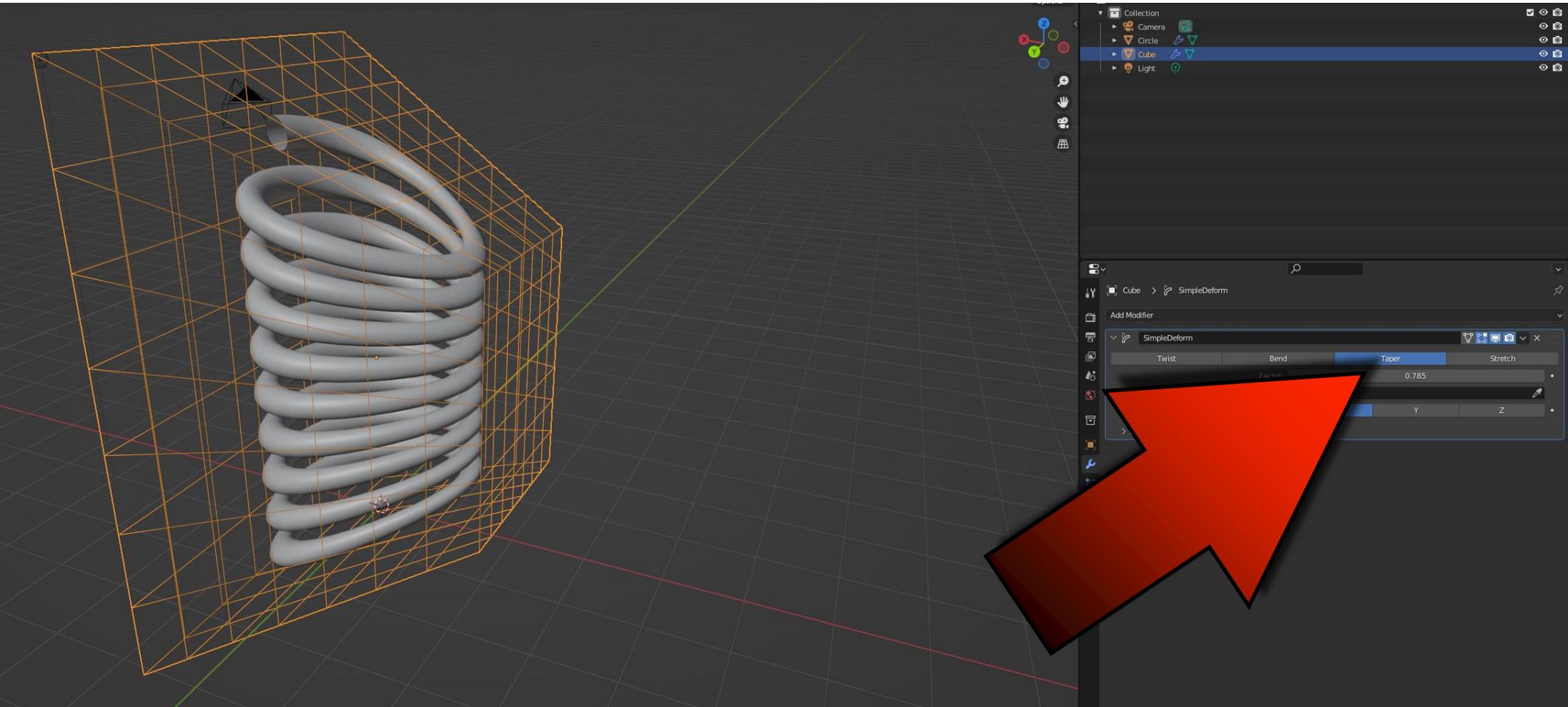
SPRING

CLICK ON **BEND**



SPRING

CLICK ON **TRAPER**



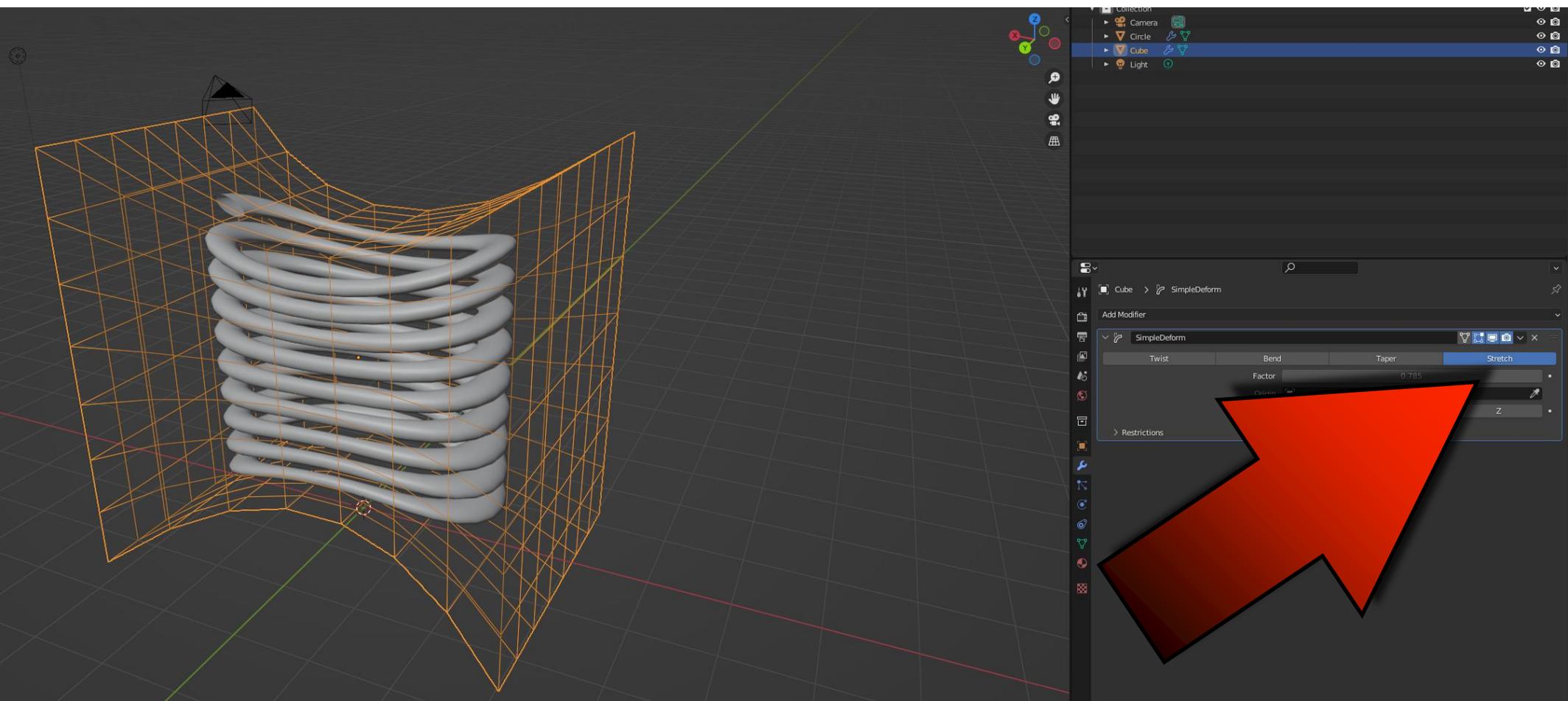
SPRING



POWER OF AR AND VR



CLICK ON **STRETCH**



SPRING

POWER OF AR AND VR

SET FOR STRECHT

FACTOR = 0



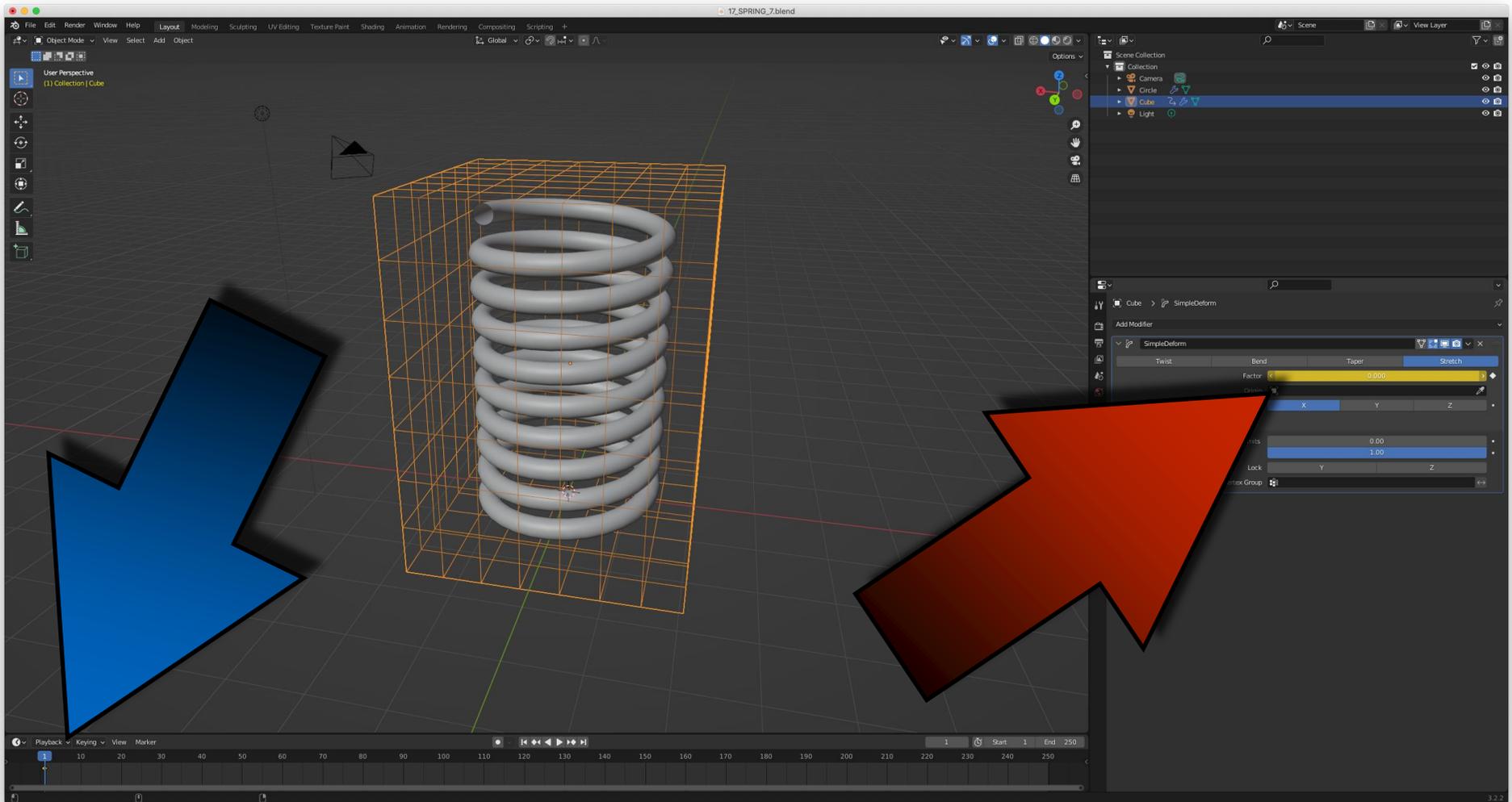
SPRING



POWER OF AR AND VR



FOR THE FIRST FRAME SAVE **FACTOR = 0**



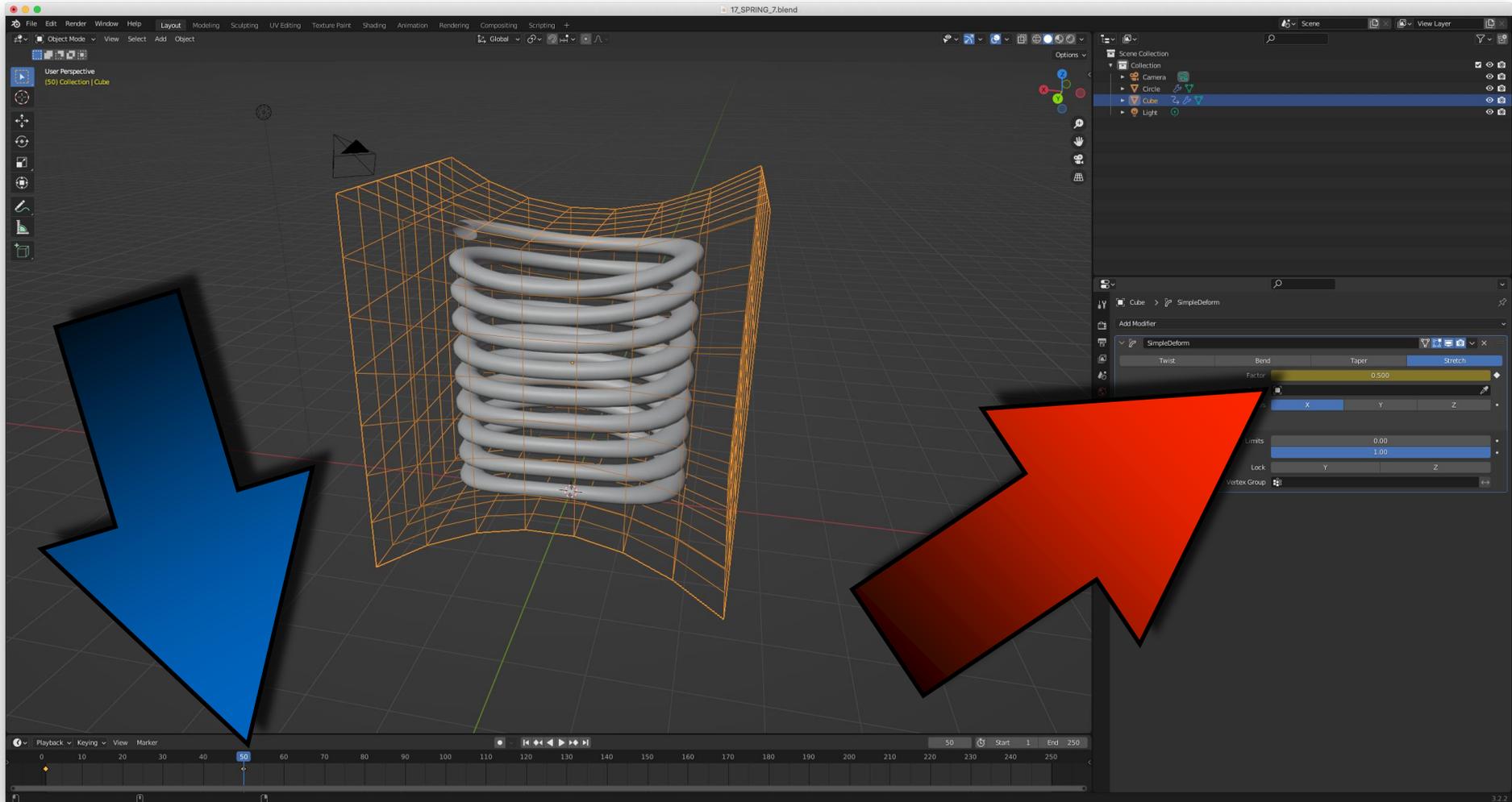
SPRING



POWER OF AR AND VR

FOR 50 FRAME

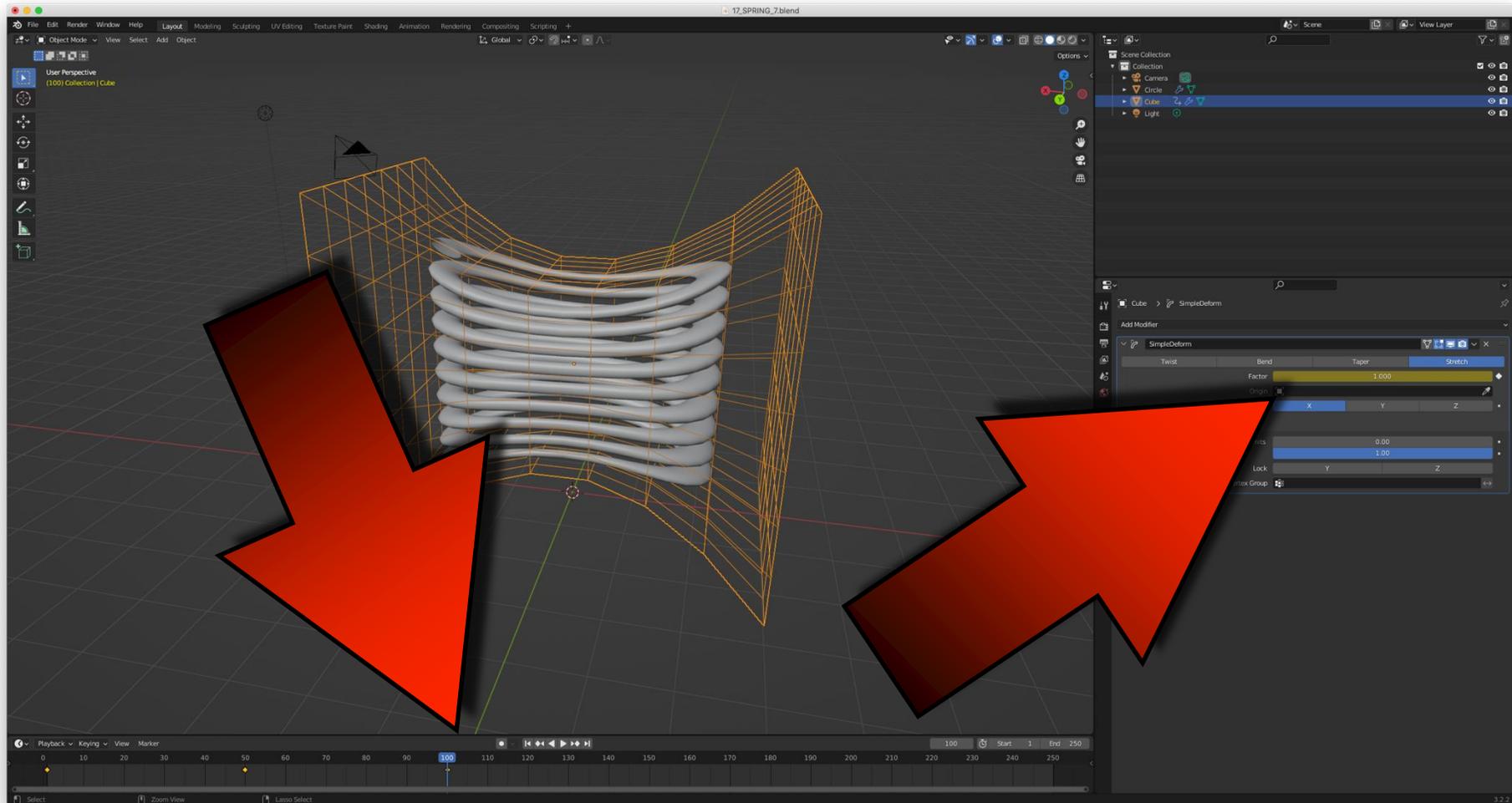
SAVE FACTOR = 0.5



SPRING

POWER OF AR AND VR

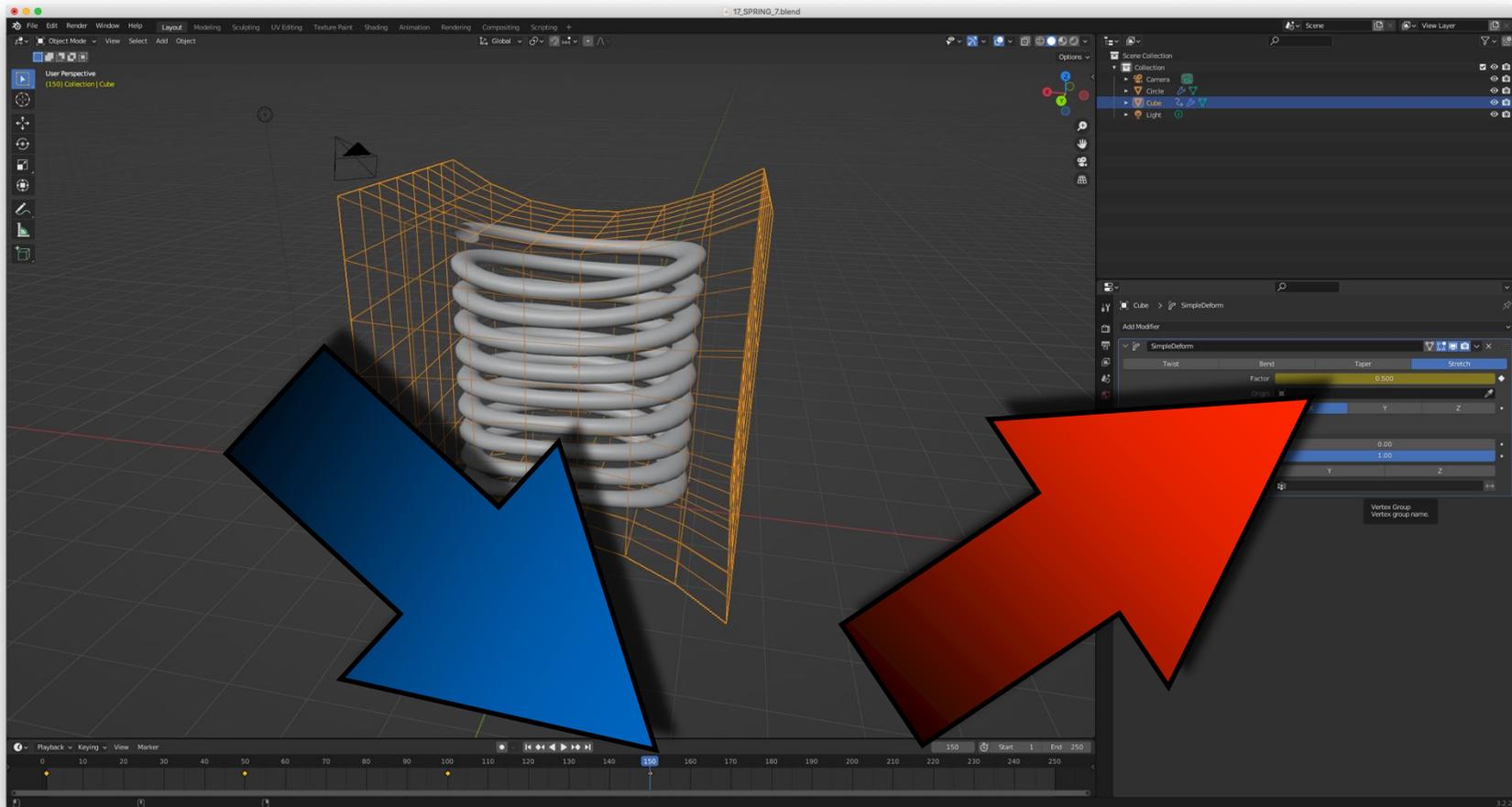
FOR 100 FRAME
SAVE FACTOR = 1



SPRING

POWER OF AR AND VR

FOR 150 FRAME SAVE FACTOR = 0.5

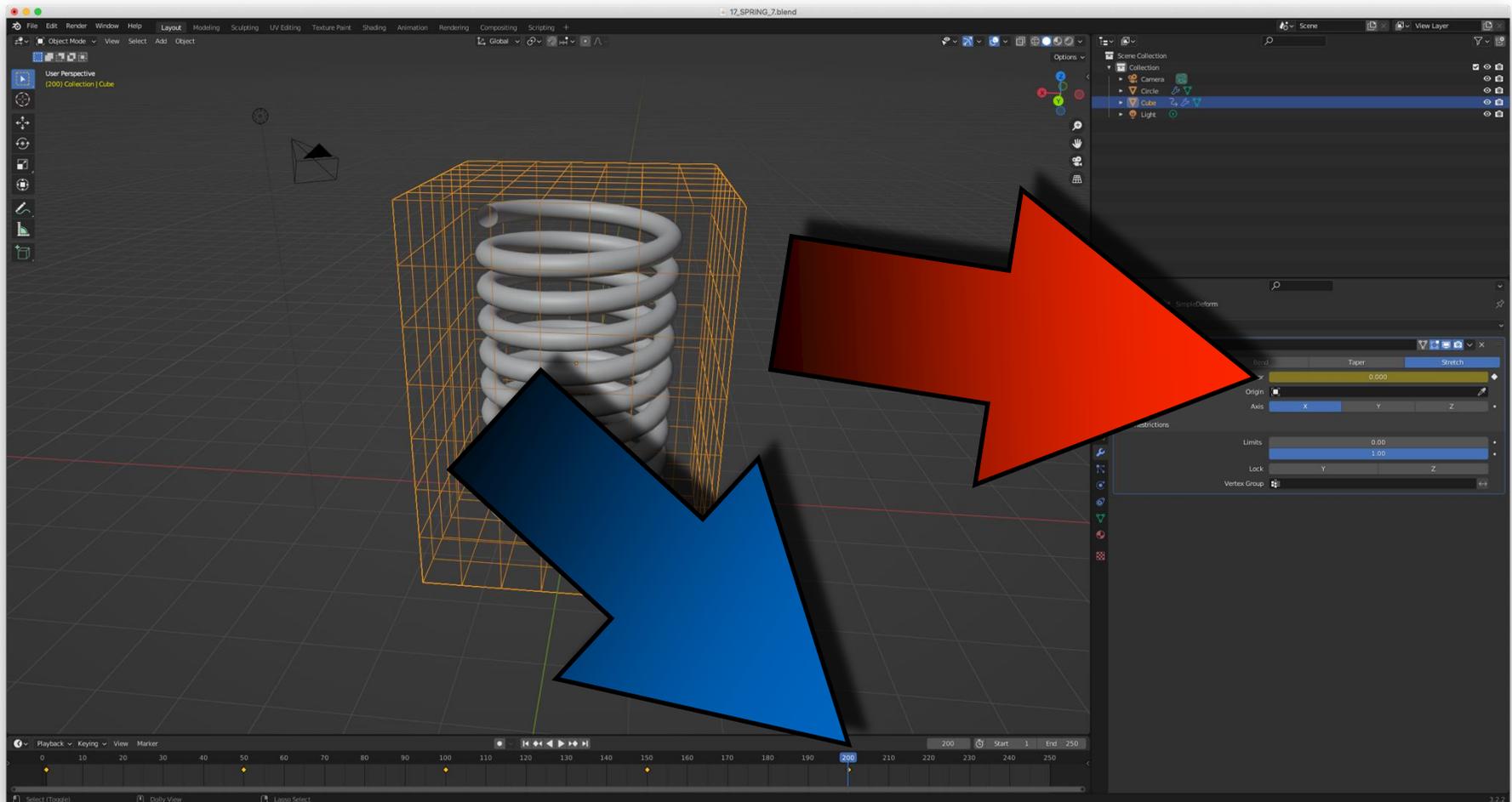


SPRING



POWER OF AR AND VR

FOR 200 FRAME
SAVE FACTOR = 0



SPRING



POWER OF AR AND VR



**PRESS THE SPACEBAR
AND SEE THE ANIMATION**



<https://youtu.be/dY9j2Rey15Q>

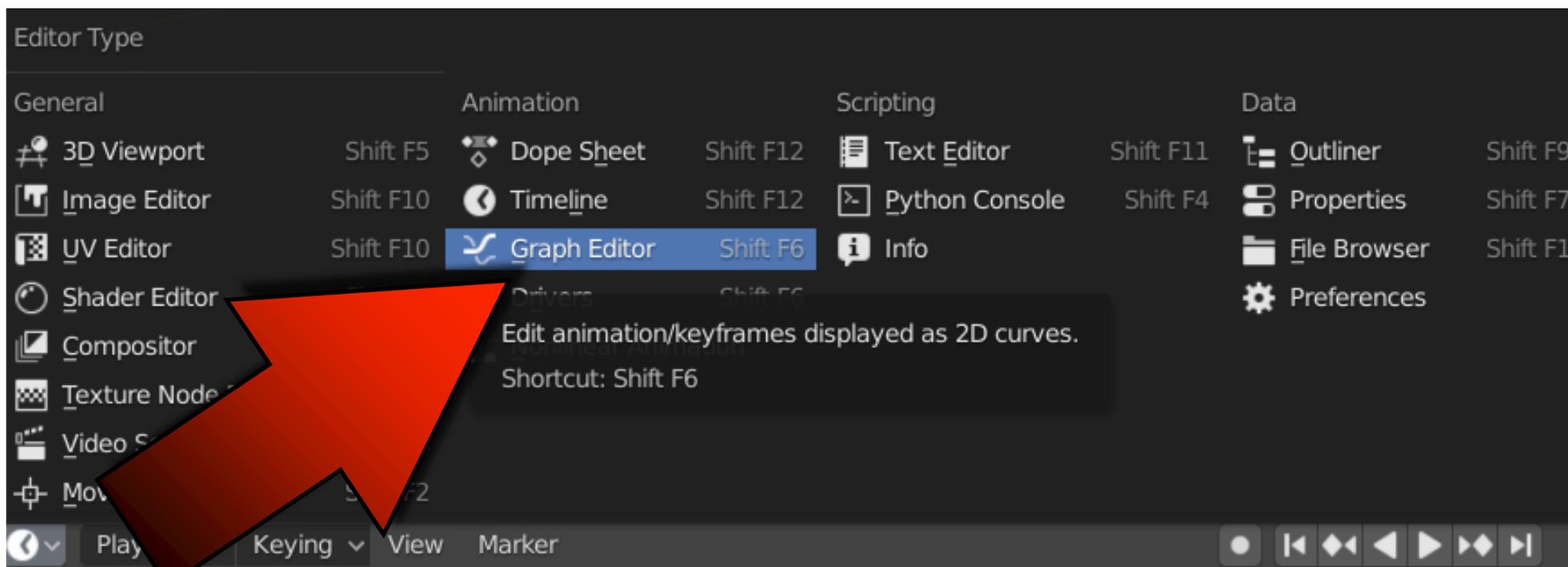
SPRING



POWER OF AR AND VR

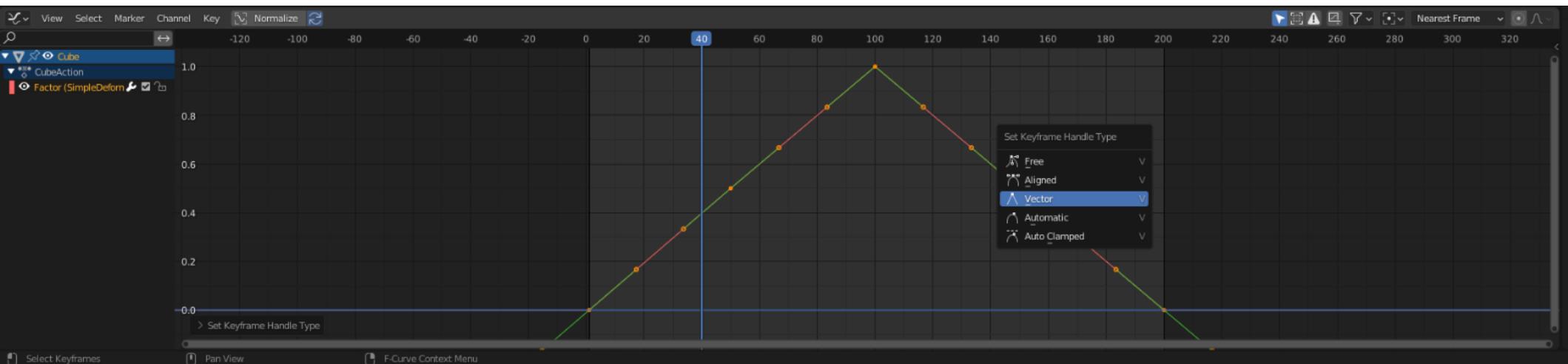
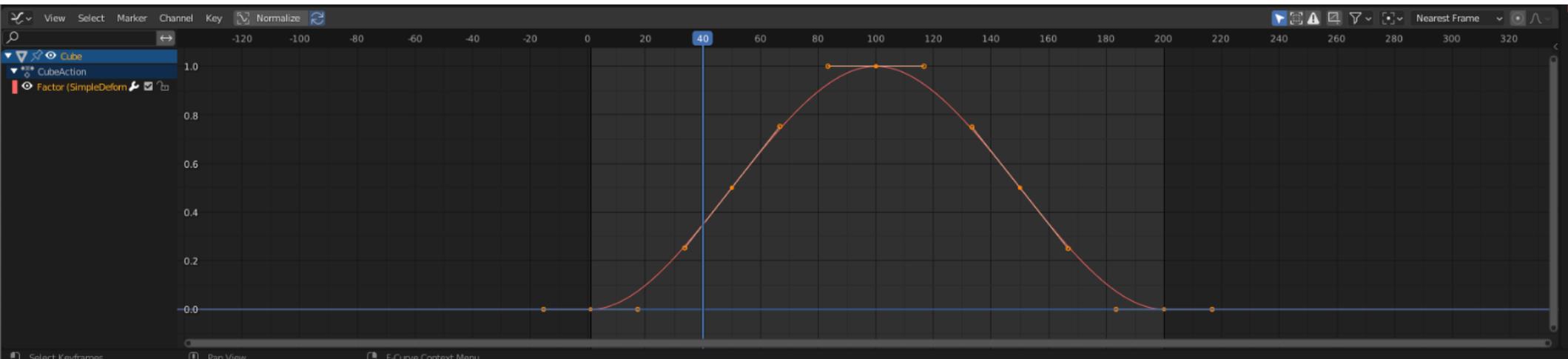


ENTER GRAPH EDITOR



SPRING

CHANGE VERTEX



SPRING



POWER OF AR AND VR



**PRESS THE SPACEBAR
AND SEE THE ANIMATION**



https://youtube.com/shorts/1a4r1mP_LWY?feature=share

SPRING

POWER OF AR AND VR

THANK YOU FOR YOUR ATTENTION



Co-funded by
the European Union



JACEK KAWAŁEK