

MICROSCOPE

WARNING!

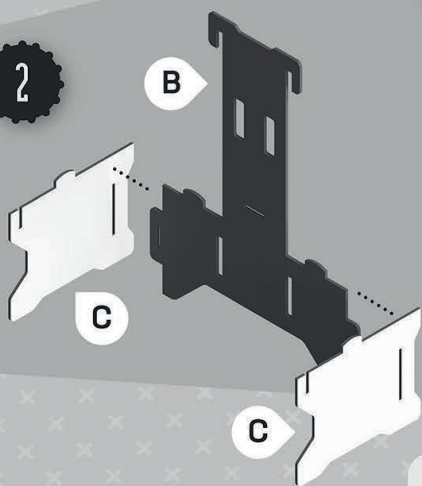
- Use only under adult supervision and/or guidance - Only to be used by persons capable of understanding the safety aspects concerning misuse of the product.
- Recommended age 8+ NOT suitable for children under 3 years
- Small parts could be a choking hazard
- Retain these instructions for future reference
- DO NOT look directly at any light source, especially under magnification. Permanent and irreversible eye damage may occur.
- DO NOT leave the microscope unattended, especially with children or adults who may not be familiar with the risks mentioned above.
- DO NOT store in places where direct sunlight may enter the lenses. Always cover any lenses with the protective caps when not in use.

1

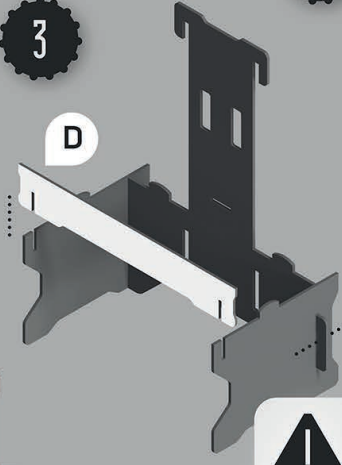
TOP TIP
Part **A** can be used to help push out the smaller pieces



2



3



4



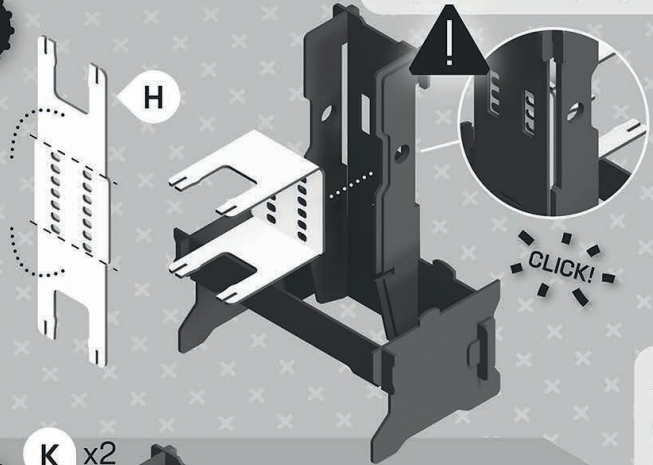
REPEAT ON BOTH SIDES

5



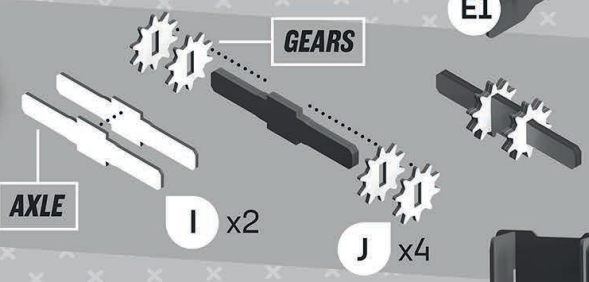
REPEAT ON BOTH SIDES

6



Push piece back until it **clicks** into the gaps in the back of the frame

7



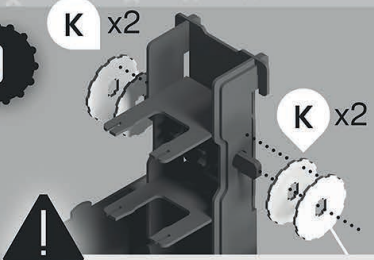
8

Bend out the side pieces to make it easier to slot in the axle.



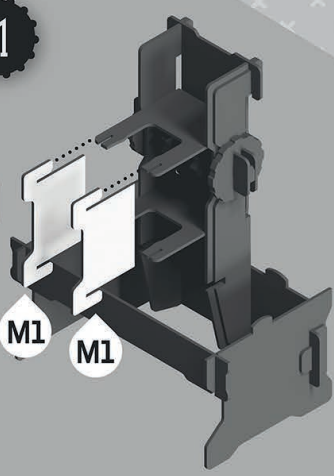
Ensure the gears slot into the holes in the back piece

9

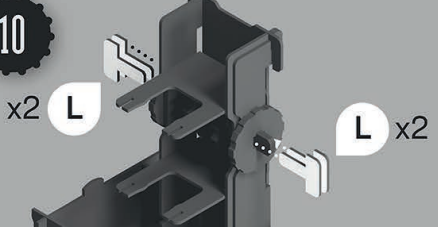


Make sure the **holes** in the dials are in line!

11



10



SCAN FOR VIDEO INSTRUCTIONS AND MORE FUN STUFF!

buildyourownkits.com

12

MIRROR

N

Remove protective film from front face of mirror

Fold down the angled pieces, line up with the slots and wrap the sides around to form a box

13

LIGHT PERISCOPE

O

Push in fully!

14

Dial up the holder to make more space to slot in tray and periscope!

Push tray into slot

To help slide the tray pieces over the teeth on the base, bend up the sides slightly

CLICK!

15

CLICK!

When the tray is in place, push down onto the teeth on the base

MAIN FRAME

16

Q

Fold out the 3 longer tabs and the longest tab slightly so they point straight up

17

R1

LARGE LENS

R3

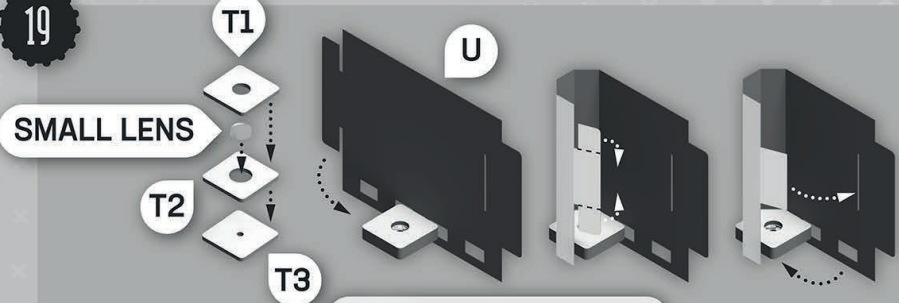
R2

18

S

EYEPIECE TUBE

19



SMALL LENS

T2

T1

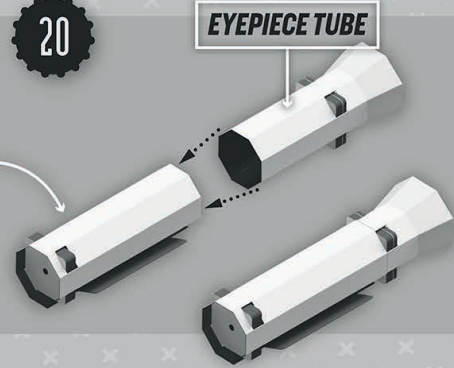
T3

U

LOWER TUBE

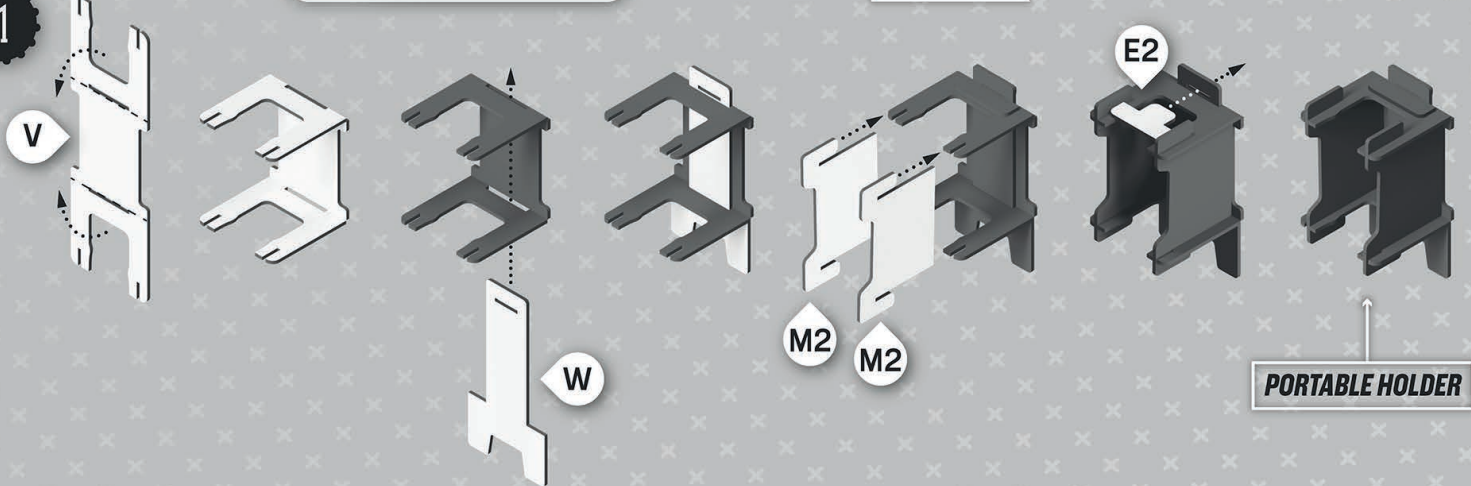
! Make sure **T3** (smallest hole) is at the bottom!

20



EYEPIECE TUBE

21



V

W

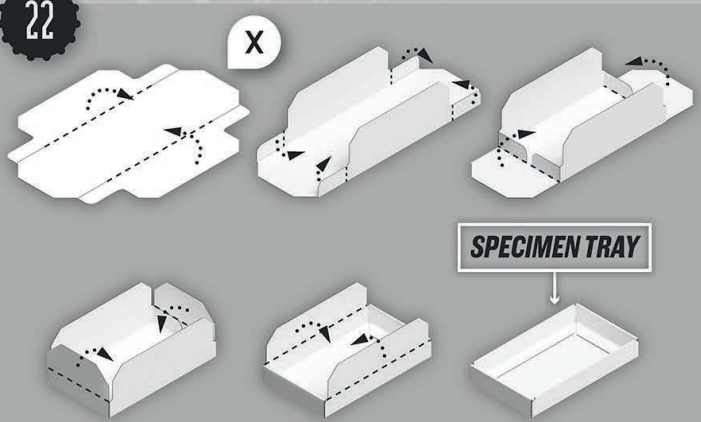
M2

M2

E2

PORTABLE HOLDER

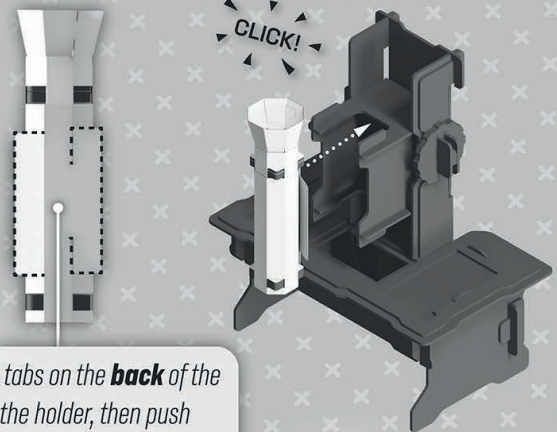
22



X

SPECIMEN TRAY

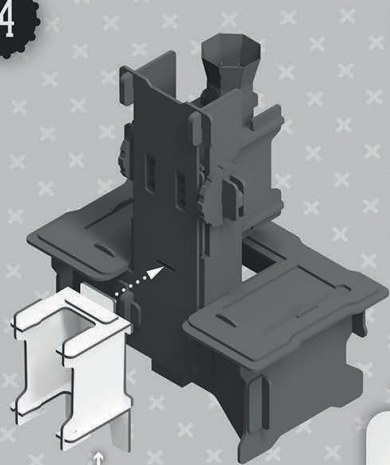
23



CLICK!

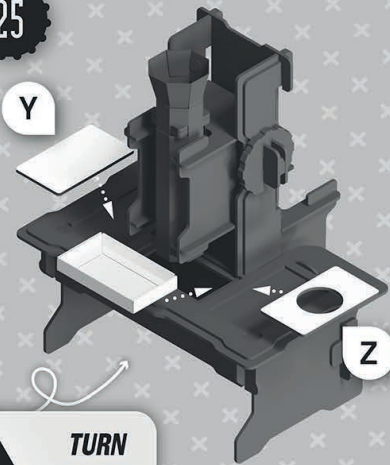
! Line up the tabs on the **back** of the tubes with the holder, then push the tubes in and click into place

24



PORTABLE HOLDER

25



Y

Z

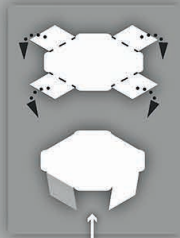
! TURN AROUND

YOU'RE A BYO BUILDER!

YOU DID IT!

#BYOmicroscope

How to use the Microscope

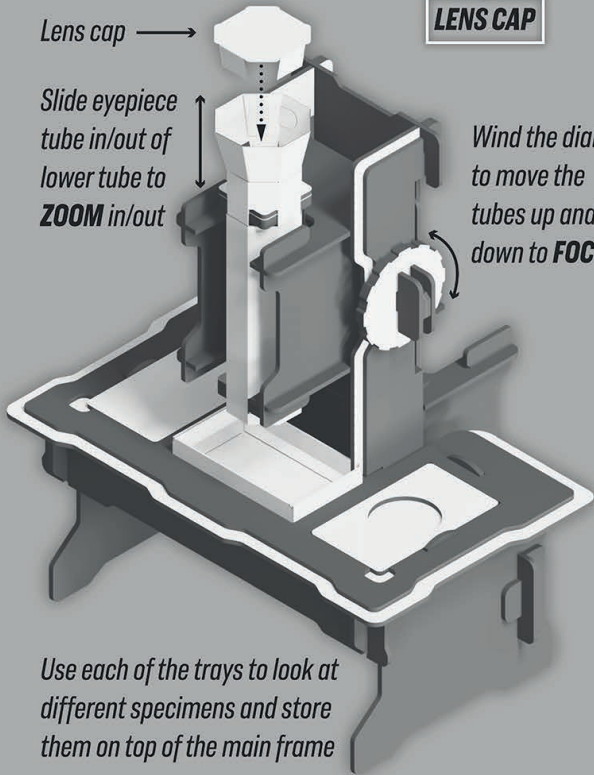


LENS CAP

Lens cap →

Slide eyepiece tube in/out of lower tube to **ZOOM** in/out

Wind the dials to move the tubes up and down to **FOCUS**



Use each of the trays to look at different specimens and store them on top of the main frame

How to use each tray

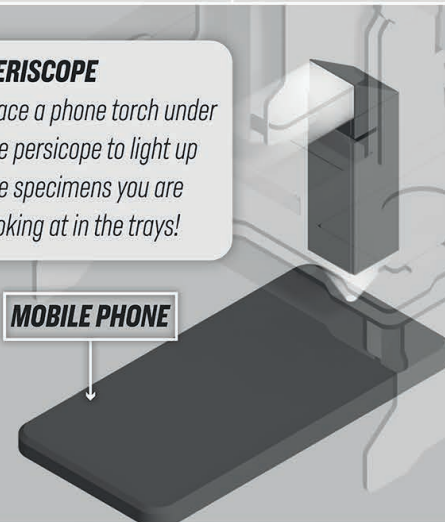
Included in this kit are 3 different trays which can each be used in different ways. See our suggestions below:

<p>X</p> <p>For retaining loose particles to be lit from above</p>	<p>Y</p> <p>For opaque objects to be lit from above</p>	<p>Z</p> <p>For translucent objects to be lit from below</p>
<p><i>You could try...</i></p>		
<p>Salt Sugar Sand Soil Flour</p>	<p>Mushrooms Insects Pet fur Flowers Rocks</p>	<p>Onion skin Feathers Leaves Petals Newspaper</p>

PERISCOPE

Place a phone torch under the periscope to light up the specimens you are looking at in the trays!

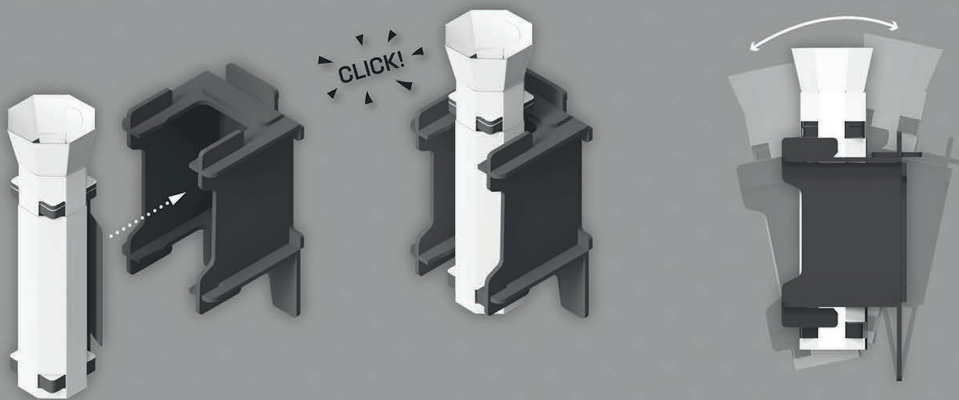
MOBILE PHONE



**DO NOT LOOK DIRECTLY AT THE LIGHT
DO NOT SHINE THE LIGHT DIRECTLY THROUGH THE MICROSCOPE**

Different ways to use the Microscope

You can use the microscope to look at whatever you want! Place the microscope in the main frame if you need precision and a tray, but if you want to take the microscope out and about e.g. in the garden, a portable holder has been provided in this kit. It can be stored on the back of the main frame, but when needed, remove the microscope tubes from the main holder and click them into the portable holder as shown below:



TOP TIP

The purpose of the holder is to fix the focus of the microscope and keep it steady. If the focus isn't quite right, tip the holder backwards/forwards until the focus is corrected.

You can also take out the microscope tubes and use them without a holder! Try taking the microscope around your house and garden and see what you can look at. Follow us on social media **@BYOKits** (Instagram and Twitter) and let us know what you find!

#BYOmicroscope