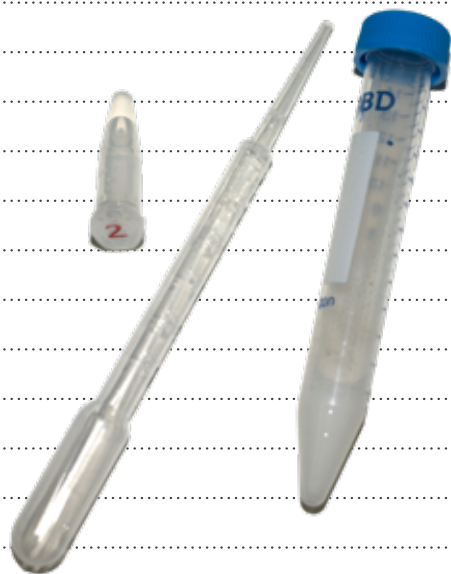




DNA EXTRACTION

DIY (DO-IT-YOURSELF)



DNA EXTRACTION

DIY (DO-IT-YOURSELF)

THE LAB BOOK YOU ARE HOLDING IS A SET OF INSTRUCTIONS THAT WILL GUIDE YOU THROUGH THE ASSEMBLING OF THE DIY SOLAR CHARGER, WHICH WAS DEVELOPED IN THE COURSE OF THE FRIDAY ACADEMY - OUR MODEL OF INQUIRY-BASED WORKSHOPS AT THE RAMP LAB WHICH ARE BASED ON NON-FORMAL AND PEER TO PEER LEARNING METHODS, OFFERING TRANSFER OF KNOWLEDGE ABOUT THE MOST RELEVANT AND MODERN TECHNOLOGICAL TOOLS.

DNA EXTRACTION, DNA IS PART OF EVERYBODY. EVERY LIVING CELL ON THIS PLANET IS HOST TO AT LEAST ONE COPY OF DNA. SOME OF THEM EVEN MORE. DNA REPRESENT BLUEPRINTS FOR BUILDING OURSELVES AND ALL LIVING ORGANISMS. WITH DNA EXTRACTION KIT WE CAN TEST IF DNA IS IN FACT PRESENT IN OUR CELLS. AND AT THE SAME TIME, SEE HOW DNA LOOKS AND FEELS LIKE. YOU HAVE TO DO IT YOURSELF TO BE SURE THAT IT IS YOUR OWN DNA.

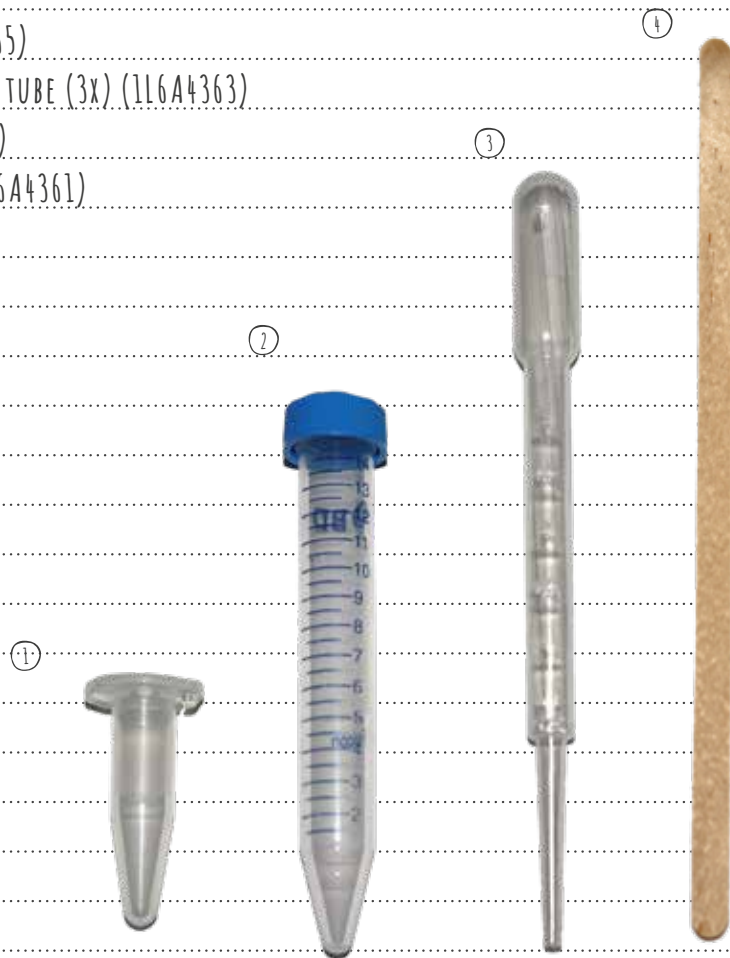
WHAT DO WE NEED?

MATERIALS:

- 1) TAP WATER
- 2) DISHWASHING LIQUID
- 3) CONTACT LENS SOLUTION
- 4) NaCl
- 5) ETHANOL

TOOLS:

- 1) TEST TUBE (1L6A4365)
- 2) MICROCENTRIFUGE TUBE (3x) (1L6A4363)
- 3) PIPETTE (1L6A4369)
- 4) WOODEN STICK (1L6A4361)



STEP-BY-STEP:

1) RUB YOUR TONGUE AGAINST THE INNER SIDE OF YOUR CHEEKS TO STIMULATE EXCRETION OF SALIVA. SPIT 1,5 ML (THE FIRST SHORT LINE UNDER NUMBER 2) OF SALIVA INTO THE TEST TUBE.

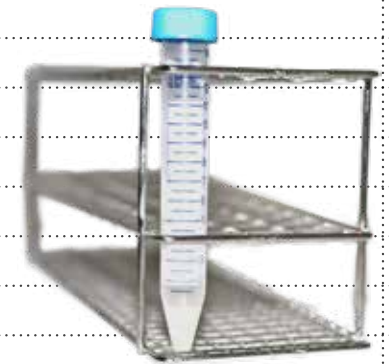
2) ADD 2 DROPS OF DISHWASHING LIQUID USING A PIPETTE (MICROCENTRIFUGE TUBE 1).

3) CLOSE THE TEST TUBE AND SHAKE.

4) ADD 4 DROPS OF THE CONTACT LENS SOLUTION USING A PIPETTE (MICROCENTRIFUGE TUBE 2).

5) CLOSE THE TEST TUBE AND SHAKE.

6) ADD A PINCH OF NaCl (MICROCENTRIFUGE TUBE 3) (1L6A4698).



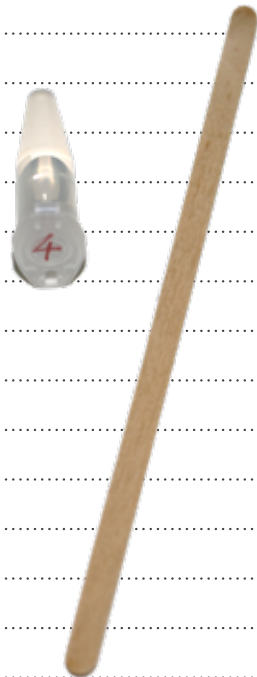
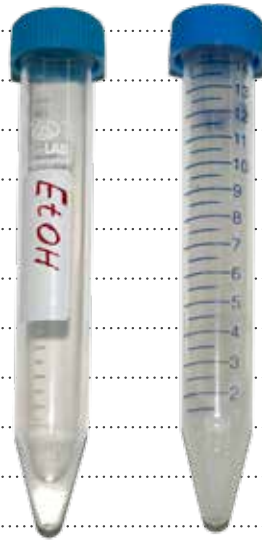
7) CLOSE THE TEST TUBE AND SHAKE FOR 1 MINUTE.

8) ADD 5 ML OF ETHANOL.

9) CLOSE THE TEST TUBE AND WAIT FOR 5 MINUTES. DNA WILL APPEAR BETWEEN THE SOLUTION AND THE ETHANOL.

10) TRANSFER DNA INTO DISTILLED WATER USING A WOODEN STICK (MICROCENTRIFUGE TUBE 4). STIR GENTLY.

NOTES:



THE KERSNIKOVA INSTITUTETHE

KERSNIKOVA INSTITUTE IS A NON-PROFIT CULTURAL ORGANIZATION THAT COMBINES THREE IMPORTANT INSTITUTIONS IN THE FIELD OF CULTURE, ART, SCIENCE, AND INVESTIGATIVE LEARNING: THE LEGENDARY KAPELICA GALLERY, THE RENOWNED ART PLATFORM FOR CONTEMPORARY INVESTIGATIVE ART; THE RAMPA LAB, HACKER SPACE FOR RESEARCHING RELATIONS BETWEEN SOCIETY, TECHNOLOGY, AND ART; AND THE INSPIRATIONAL LABORATORY BIOTEHNA WHICH FOCUSES ON THE ARTISTIC RESEARCH OF LIVING SYSTEMS.

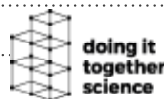
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THE LAB BOOK WAS DESIGNED IN THE COURSE OF THE EUROPEAN COMMISSION PROJECT DITOS (DOING IT TOGETHER SCIENCE) WITH THE PURPOSE TO INFORM THE GENERAL PUBLIC ABOUT MODERN SCIENCE IN EUROPE. THE PROJECT'S AIM IS TO DEEPEN THE INVOLVEMENT OF THE GENERAL PUBLIC IN CO-CREATING THE SCIENTIFIC DEVELOPMEN

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