May 2020

LabPhysics_IS5_20151116_Seg03.pdf

Setting: physics lab. S5 is teaching the class how to do the lab
Participants: IS5 (female, black sweater)

Xxx IS5: you have oh yea ((unclear))
Xxx ok
Xxx today we are going to study the ((unclear))
Xxx equivalent of (.)-
xxx heat.
Xxx uh in this experiment,
Xxx usually you have no need to use the computer,
Xxx so first you need to-
Xxx uh:
Xxx disable your ap- apparatus.
Xxx ok so look at your table,
Xxx and this is the disk,
Xxx first you need to uh:
Xxx move the small clamps.
Xxx if this clamps is on the disk
Xxx so move it.
Xxx let it leave the disk.
Xxx and then
Xxx uh:
Xxx take the stop stopper out of the disk.
Xxx and the:n (.)
Xxx put the::
Xxx sermo thermometer on the de- on on the desk.
Xxx and I think I ha- put all- >every thermometer on the
xxx desk<
Xxx and then there is two screw.
Xxx and unscrew this to screw uh:-
Xxx ok sorry.
Xxx actually uh:
Xxx you can (take) the-
Xxx the inner ((puts down the disk)).
Xxx the inner cup and outer cup
Xxx is connect with the
Xxx disk
Xxx with the screw.

Xxx do you you can uh
Xxx unscrew this to screw to
Xxx uh take the
Xxx inner cup and outer cup. ((looks for something))
Xxx and: uh
Xxx this is what you need to do in this section
Xxx and after you get this to uh:
Xxx ((moves to the other side))
Xxx uh: (these) two cups
Xxx and matter ((I think she means measure?))
Xxx the mass of this
Xxx (measure) the total mass of this two.
Xxx and we ((unclear)) -
Xxx ((she looks at the bottom of the cup and turns))
Xxx and we use ((moves to the blackboard with equation))
Xxx MV to represent total mass of of the of this two cups.
Xxx and after that we need to measure the (stirring rod).
Xxx this is the mass.
Xxx this is the stirring rod
Xxx which is used to uh:
Xxx to ((unclear)) (the water),
Xxx ((moves back to blackboard))
Xxx and then measure the mass of the thermometer,
Xxx which use M TH to express.
Xxx and after that you need to measure the room
xxx temperature.
Xxx of- because it- it take some time
Xxx to-to let the thermo-thermometer to measure the:
Xxx room of-
Xxx room tem-
Xxx room temperature so.
Xxx I have put them on the (.) desk
Xxx (you know) while so
Xxx maybe later you can read ((past tense)) the-
Xxx numbers on the thermometer
Xxx and the
Xxx um:
Xxx temperature of the room.
Xxx but uh:-
Xxx but the temp-

Xxx the measurement of each group should not be same.
Xxx because of the (.) thermometers so-
Xxx you don't need to compare other's results
Xxx you guys results are similar but not the same.
Xxx and after you measure the mass of the room temp
xxx um:
Xxx you have measure the temperature.
Xxx then
Xxx uh:
Xxx put some water,
Xxx and ((unclear))
Xxx and ice into the inner (.) cup.
Xxx put some water and ice into inner cup.
Xxx and then
xxx measure the mass of the inner cup.
Xxx and outer cup.
Xxx and water.
Xxx uh:
Xxx together and the total mass of the-
Xxx use the total mass minus the mass of uh inner and br-
3:00
Xxx and outer cup you can get the mass of the water,
Xxx and then you can fill the first table in your
xxx worksheet.
Xxx and after that ((looks for something))
Xxx sorry uh:
Xxx after then you you need to ag- uh: wait for some time
Xxx to make sure that the temperature of the water is 608
Xxx uh below the room temperature.
Xxx and after that uh-
Xxx when when the >temperature of the water satisfy the
xxx requirement<
Xxx then you can ((grabs something))
Xxx put the:
Xxx cup,
xxx into the-
Xxx I don't know what's this.
Xxx maybe crack
Xxx and make sure that there is two uh-
Xxx kind of things.
Xxx and make sure that it uh:-

Xxx and then the same thing in this sect-
Xxx ((fiddles with the cup)
Xxx and:
Xxx after that, ((fiddling still)
Xxx ok after that.
Xxx put the screw here,
xxx to screw them.
Xxx to fix the inner cup.
xxx and the disk.
Xxx and then uh:
Xxx put this into the stopper,
Xxx >(thermo) into the stopper<.
Xxx and the stir-
Xxx and this one to us- to reassemble you apparatus.
Xxx yes.
Xxx and after that,
TRF >the important thing you need to< turn your (crack).
TRF and uh: ((looks down))
TRF uh look at your ((unclear))-
TRF there should be a counter,
TRF there should a counter yea. ((goes to another station))
TRF here.
TRF there should be a counter uh so-
TRF you need to use a counter to to make sure the- the
TRF number of the:-
TRF ((walks around for eraser))
TRF need to use the counter to-
TRF the (third) is to reassemble.
TRF and four is to measure the temperature,
TRF and first you need to make your coun-
TRF ((she saids first again but its a subgroup of the
TRF previous point so it makes sense))
TRF check your counter.
TRF the thing is uh:-
TRF some of uh:-
TRF you can uh-
Xxx make a symbol on the on this thing
Xxx and try to let-
Xxx let the ((unclear)) rotate for once.
Xxx and and to say

xxx your counter jumped for one or ten.
Xxx because it’s different.
Xxx some- some one-
Xxx some uh counter jump for ten and some for one.
Xxx so you need to check this one.
Xxx and if you- if your counter jump for ten,
Xxx so the result-
Xxx (I mean) final n you got from the:
Xxx counter you need to over 10.
Xxx to get the exact number,
xxx (you will you take).
6:00
Xxx and second uh you need to-
Xxx make sure that the uh-
Xxx put uh-
Xxx put this (clamper) on the disk to increase the (.)
Xxx friction,
Xxx and uh when you ((clears throat))-
Xxx where is the ((looks))-
Xxx and then put the string in the grove.
Xxx to make sure that there are aligned
Xxx to the: ((fixes))-
Xxx to the (.)- to the- ((thinks hard))
Xxx ((unclear)) of the disk.
Xxx and then we use the (rotate),
Xxx ok so it's not very
Xxx when you rotate the crank,
Xxx the disk will rotate,
Xxx so ((does it))
Xxx and you can read the force from the:-
Xxx spring,
Xxx and it might be jumped from uh: the >between two values
Xxx so you can you uh the value uh
Xxx record is the< average value.
Xxx and then,
xxx while one of you is taking the- keeping the-
Xxx you the (crank)
xxx don’t stop.
Xxx and then another one with the temperature,
Xxx with the temperature and the force.

Xxx until the temperature of the water is higher than
Xxx temperature of the room.
xxx of the room temperature,
Xxx yes.
Xxx and: uh when you get the final temperature,
Xxx and compare it with the initial temperature
Xxx and difference of them is (delta) T.
Xxx you need to write on your (.) worksheet.
Xxx and yea.
Xxx that’s (what you do).
Xxx >do you have any question<
Xxx so you can start.
Xxx ((sighs))