**Who had it right? – Microscope Edition**

**In each situation, a pair of students is using microscopes. Look over their techniques and determine which one, if any, are using the proper steps. If a student is making a mistake, underline it in the description. You can earn 1 point for every 2 situations you answer correctly.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Student 1** | **Student 2** | **Who was right?** |
| 1. | Justin predicted the object would need the lowest magnification so he lowered the stage to the lowest position before inserting the slide. | Selena predicted that the object would need the highest magnification so she raised the stage to the highest position before inserting the slide. |  |
| 2. | Harry thought the glass slide would make it difficult to see the specimen, so he put the object directly on the stage to view it. | Liam knew he could move the specimen around under the lens if he put it on a slide first so he put it on a slide before putting it in the microscope. |  |
| 3. | Once Thor switched the objective lens to high power, he used the coarse adjustment knob to focus. | Once Hulk switched the objective lens to high power, he used the fine adjustment knob to focus. |  |
| 4. | Snoopy thought the image would be colorless, so he turned the diaphragm to the lowest setting before putting the image in the microscope. | Woodstock thought the image would be dark, so he turned the diaphragm to the highest setting before putting the image in the microscope. |  |
| 5. | Hermione used the low power (4X) and medium power (10X) to view a specimen. The ocular lens was 10X. To calculate the total magnification she multiplied 4 times 10 times 10 and got 400X. | Ron used the low power (4X) and medium power (10X) to view a specimen. The ocular lens was 10X. To calculate the total magnification, he multiplied 10 times 10 and got 100X. |  |
| 6. | LeBron suspected that some dust got on the objective lens. He used a paper towel to wipe it away. | Dwayne suspected that some dust got on the objective lens. He used his finger to wipe it away. |  |
| 7. | Nicki was using the high power objective and the specimen was blurry. She turned the fine adjustment towards her until the slide was touching the objective lens. | Rihanna was using the high power objective lens and the specimen was blurry. She turned the fine adjustment away from her first. |  |
| 8. | Lefty  http://dtc.pima.edu/blc/105/502/diverfolder/divimages/carryingscope.jpg | Righty  http://www.scs.sk.ca/cyber/elem/learningcommunity/sciences/biology20/curr_content/biology20/Library/mscope_carry_wrong1.jpg |  |

**Who had it right? – Microscope Edition**

**In each situation, a pair of students is using microscopes. Look over their techniques and determine which one, if any, are using the proper steps. If a student is making a mistake, underline it in the description. You can earn 1 point for every 2 situations you answer correctly.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Student 1** | **Student 2** | **Who was right?** |
| 1. | Justin predicted the object would need the lowest magnification so he lowered the stage to the lowest position before inserting the slide. | Selena predicted that the object would need the highest magnification so she raised the stage to the highest position before inserting the slide. |  |
| 2. | Harry thought the glass slide would make it difficult to see the specimen, so he put the object directly on the stage to view it. | Liam knew he could move the specimen around under the lens if he put it on a slide first so he put it on a slide before putting it in the microscope. |  |
| 3. | Once Thor switched the objective lens to high power, he used the coarse adjustment knob to focus. | Once Hulk switched the objective lens to high power, he used the find adjustment knob to focus. |  |
| 4. | Snoopy thought the image would be colorless, so he turned the diaphragm to the lowest setting before putting the image in the microscope. | Woodstock thought the image would be dark, so he turned the diaphragm to the highest setting before putting the image in the microscope. |  |
| 5. | Hermione used the low power (4X) and medium power (10X) to view a specimen. The ocular lens was 10X. To calculate the total magnification she multiplied 4 times 10 times 10 and got 400X. | Ron used the low power (4X) and medium power (10X) to view a specimen. The ocular lens was 10X. To calculate the total magnification, he multiplied 10 times 10 and got 100X. |  |
| 6. | LeBron suspected that some dust got on the objective lens. He used a paper towel to wipe it away. | Dwayne suspected that some dust got on the objective lens. He used his finger to wipe it away. |  |
| 7. | Nicki was using the high power objective and the specimen was blurry. She turned the fine adjustment towards her until the slide was touching the objective lens. | Rihanna was using the high power objective lens and the specimen was blurry. She turned the fine adjustment away from her first. |  |
| 8. | Lefty  http://dtc.pima.edu/blc/105/502/diverfolder/divimages/carryingscope.jpg | Righty  http://www.scs.sk.ca/cyber/elem/learningcommunity/sciences/biology20/curr_content/biology20/Library/mscope_carry_wrong1.jpg |  |