

Proposal for Value Added Course in Science for session 2022-23

Submitted to

IQAC, Government College Drang at Narla District Mandi (H.P.)

Course Title – General Laboratory Practices and Safety measures

Course Code – VACS01

Course duration – 30 Hours (Six weeks)

Credits -05

Objective

Laboratory learning plays an important role in science teaching and learning process. However, safety of student during experimental learning is very important as laboratories are prone to accidents. Therefore, it becomes primary duty of teachers to make the students aware of general practices and safety measures to be taken in laboratory. This course aims to create structured awareness about general and safe laboratory practices for effective experimental learning.

Learning Outcomes

After completing this course, the learner will be able to:

- Apply basic practical skills in science courses by understanding general laboratory practices
- Take various precautions about lab safety while performing experiments
- Apply various immediate remedial techniques in case of lab accidents

Curriculum and course delivery plan

Module 1: General understanding of chemistry lab usage (2 Hrs)

Module 2: Understanding the safety symbols in chemistry and on reagent bottles (2 Hrs)

Module 3: Knowledge about common toxic chemicals and safety measures in their handling (3 Hrs)

Module 4: Chemical Accidents and their First Aid Measures (4 Hrs)

Module 5: Chemical Spills and their Preventive Measures (4 Hrs)

Module 6: *Physics lab* (2 Hrs)

Module 7: *Physics lab* (3 Hrs)

Module 8: Sterilization techniques in lab (2 Hrs)

Module 9: Handling of microscopes and field study of plants (2 Hrs)

Module 10: Tissue culturing and safety measures (2 Hrs)

Module 11: *Zoology Lab* (2 Hrs)

Module 12: *Zoology Lab* (2 Hrs)

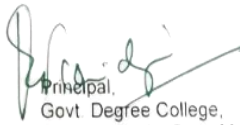
Scheme of Examination for the award of course Certificate by the college

Value added course will carry 50 marks of following components:

- | | |
|----------------------|----------|
| a) Assignment/Quiz | 15 marks |
| b) Attendance | 05 marks |
| c) Final Examination | 30 marks |

LIST OF STUDENTS ENROLLED FOR VALUE ADDED COURSE

| Sr. No. | Name | Class | Univ. Roll No. |
|---------|-----------------|-----------|----------------|
| 1 | Anchal Kumari | B.Sc. 3rd | 2200270007 |
| 2 | Kamini | B.Sc. 3rd | 2200270012 |
| 3 | Pomesh Kant | B.Sc. 3rd | 2200270019 |
| 4 | Raksha | B.Sc. 3rd | 2200270021 |
| 5 | Ritika Kumari | B.Sc. 3rd | 2200270025 |
| 6 | Sonia | B.Sc. 3rd | 2200270029 |
| 7 | Suman Thakur | B.Sc. 3rd | 2200270030 |
| 8 | Tamanna Devi | B.Sc. 3rd | 2200270032 |
| 9 | Akanksha Thakur | B.Sc. 2nd | 2210270001 |
| 10 | Deepak | B.Sc. 2nd | 2210270008 |
| 11 | Neha | B.Sc. 2nd | 2210270018 |
| 12 | Nisha | B.Sc. 2nd | 2210270021 |
| 13 | Shreya Sharma | B.Sc. 2nd | 2210270031 |
| 14 | Anurag | B.Sc. 2nd | 2210270004 |
| 15 | Bhuvneshwar | B.Sc. 2nd | 2210270006 |
| 16 | Chirag | B.Sc. 2nd | 2210270007 |
| 17 | Dimpal | B.Sc. 2nd | 2210270009 |
| 18 | Himani Thakur | B.Sc. 2nd | 2210270011 |
| 19 | Mansi Thakur | B.Sc. 2nd | 2210270017 |
| 20 | Riya Kumari | B.Sc. 2nd | 2210270028 |
| 21 | Sanjna Kumari | B.Sc. 2nd | 2210270030 |
| 22 | Chetan | B.Sc. 2nd | 2210270011 |
| 23 | Arkshita Katoch | B.Sc. 2nd | 2210270005 |
| 24 | Anita | B.Sc. 2nd | 2210270001 |


Principal,
Govt Degree College,
Drang at Narla, Distt. Mandi (H.P.)

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

ANCHAL KUMARI



SCIENCE
VALUE ADDED COURSE

B.Sc. **third** Roll No. **2200270007** of **GDC Drang at Narla, Mandi (HP)** has successfully completed value added course on “**General Laboratory Practice and Safety Measures**”.

Convenor

Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

KAMINI



SCIENCE
VALUE ADDED COURSE

Class **B.Sc. third** Roll No. **2200270012** of **GDC Drang at Narla, Mandi (HP)** has successfully completed value added course on “**General Laboratory Practice and Safety Measures**”.

Convenor

Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

POMESH KANT



SCIENCE
VALUE ADDED COURSE

B.Sc. **third** Roll No. **2200270019** of **GDC Drang at Narla, Mandi (HP)** has successfully completed value added course on “**General Laboratory Practice and Safety Measures**”.

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Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

RAKSHA



SCIENCE
VALUE ADDED COURSE

B.Sc. **third** Roll No. **2200270021** of **GDC Drang at Narla, Mandi (HP)** has successfully completed value added course on “**General Laboratory Practice and Safety Measures**”.

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Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

RITIKA KUMARI



SCIENCE
VALUE ADDED COURSE

B.Sc. **third** Roll No. **2200270025** of **GDC Drang at Narla, Mandi (HP)** has successfully completed value added course on “**General Laboratory Practice and Safety Measures**”.

Convenor

Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

SONIA



SCIENCE
VALUE ADDED COURSE

B.Sc. third Roll No. 2200270029 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

Convenor

Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

SUMAN THAKUR



SCIENCE
VALUE ADDED COURSE

B.Sc. **third** Roll No. **2200270030** of **GDC Drang at Narla, Mandi (HP)** has successfully completed value added course on “**General Laboratory Practice and Safety Measures**”.

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Principal

Govt. Degree College Drang at Narla



Certificate of Completion

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TAMANNA DEVI



SCIENCE
VALUE ADDED COURSE

B.Sc. **third** Roll No. **2200270032** of **GDC Drang at Narla, Mandi (HP)** has successfully completed value added course on “**General Laboratory Practice and Safety Measures**”.

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Certificate of Completion

This is to certify that

AKANKSHA THAKUR



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270001 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

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Certificate of Completion

This is to certify that

DEEPAK



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270008 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

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Certificate of Completion

This is to certify that

NEHA



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270018 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

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Principal

Govt. Degree College Drang at Narla



Certificate of Completion

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NISHA



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270021 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

Convenor

Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

SHREYA SHARMA



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270031 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

Convenor

Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

ANURAG



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270004 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

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Principal

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Certificate of Completion

This is to certify that

BHUVNESHWAR



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270006 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

Convenor

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Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

CHIRAG



SCIENCE

VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270007 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

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Principal

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Certificate of Completion

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DIMPAL



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270009 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

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Certificate of Completion

This is to certify that

SANJNA KUMARI



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270030 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

Convenor

Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

HIMANI THAKUR



SCIENCE
VALUE ADDED COURSE

B.Sc. **Second** Roll No. **2210270011** of **GDC Drang at Narla, Mandi (HP)** has successfully completed value added course on “**General Laboratory Practice and Safety Measures**”.

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Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

MANSI THAKUR



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270017 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

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Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

RIYA KUMARI



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2210270028 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

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Principal

Govt. Degree College Drang at Narla



Certificate of Completion

This is to certify that

CHETAN



SCIENCE
VALUE ADDED COURSE

B.Sc. Second Roll No. 2200270011 of GDC Drang at Narla, Mandi (HP) has successfully completed value added course on “General Laboratory Practice and Safety Measures”.

Convenor

Principal

Value Added Course

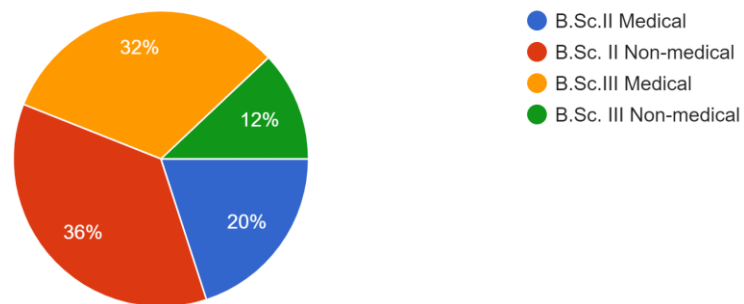
'General Laboratory Practices and Safety Measures'

VALUE ADDED QUIZ

Link: <https://forms.gle/GT6589RSbHdEsXcBA>

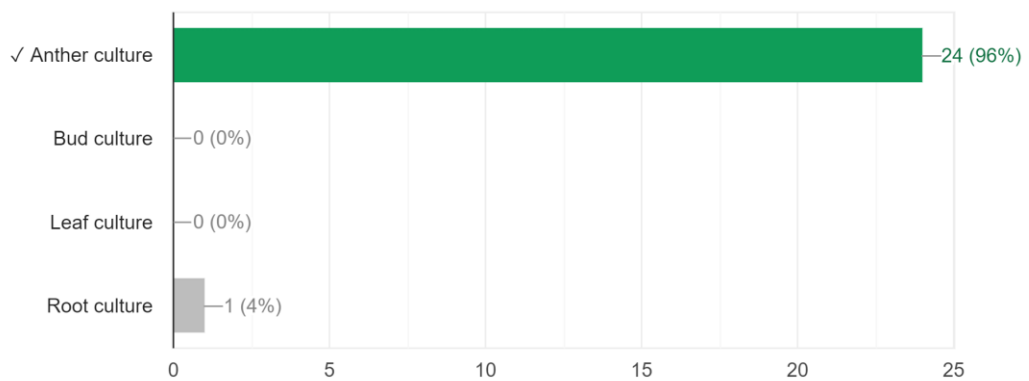
Class

25 responses



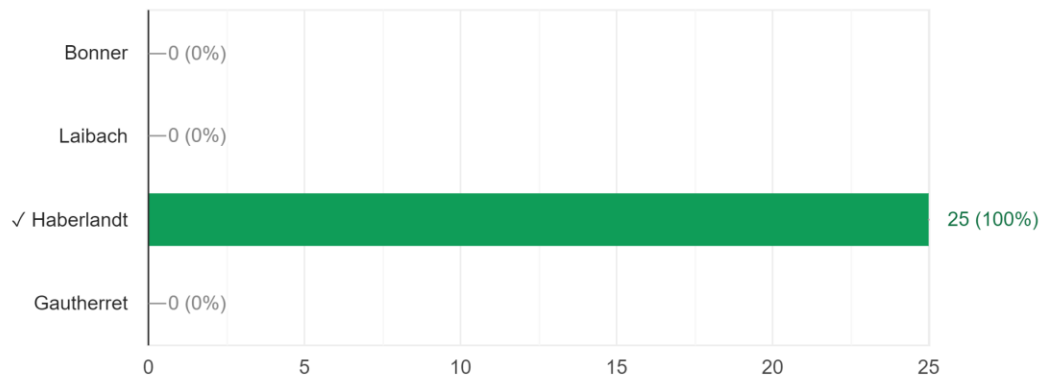
1. Haploid plants can be obtained from.....

24 / 25 correct responses



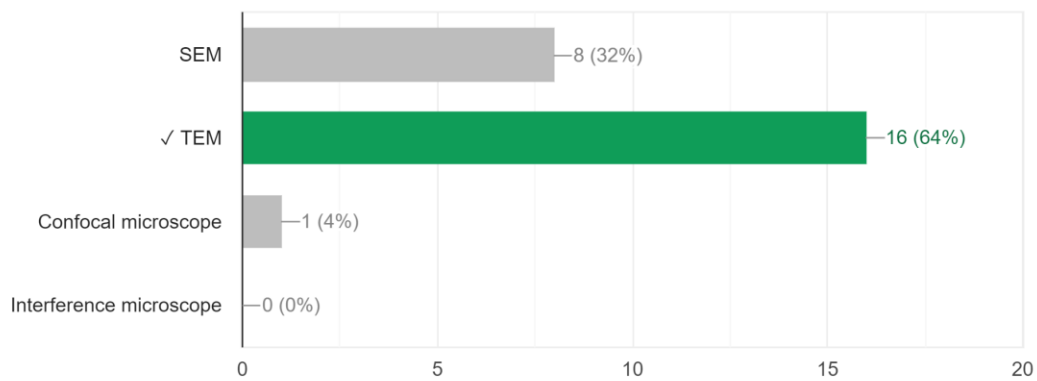
2. Who is known as the father of tissue culture?

25 / 25 correct responses



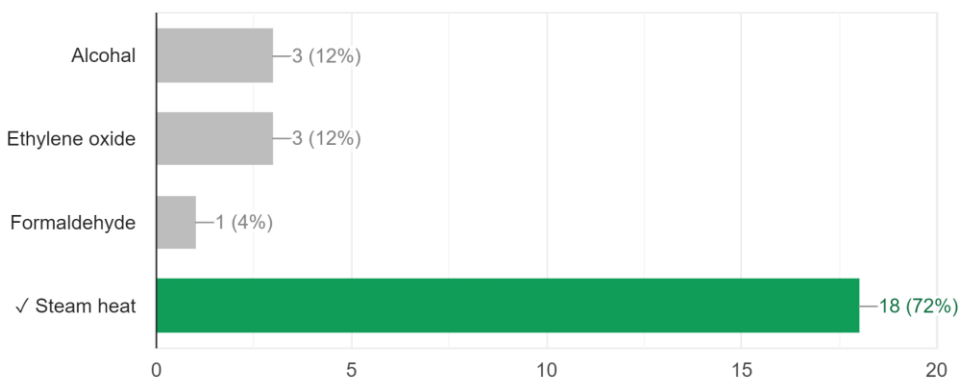
3. Which of the following microscope is best suited for studing ultrastructure of cells?

16 / 25 correct responses



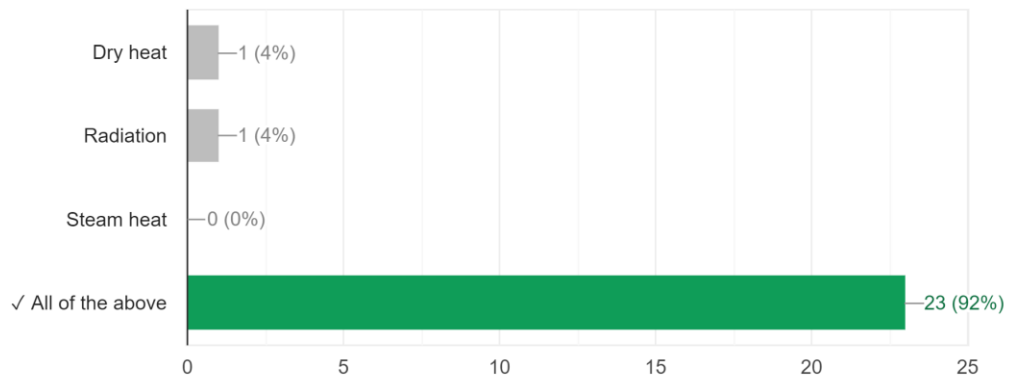
4. All the following chemical disinfectants used in laboratories and health care industries have been found to be effective against many bacteria, fungi and viruses, except...

18 / 25 correct responses



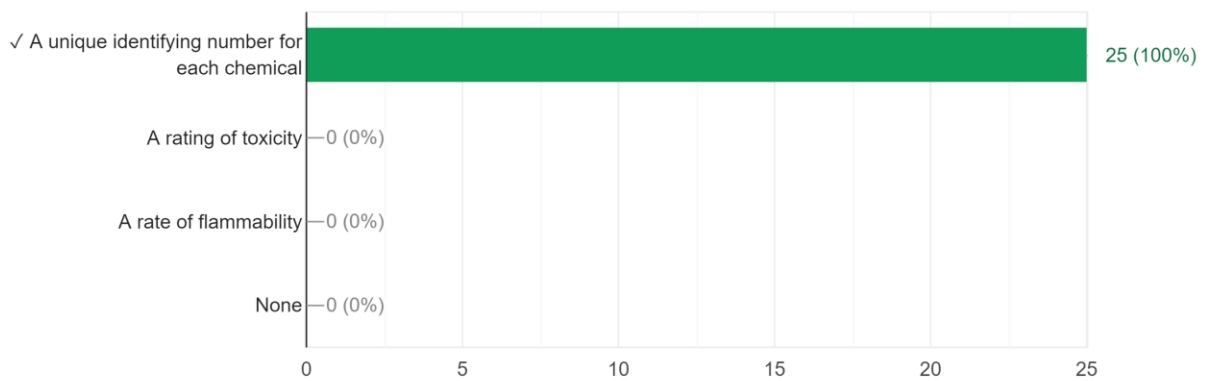
5. Name the common physical agents used for the sterilization process in health facilities, such as microbiology laboratories, hospitals and biotechnology industries.

23 / 25 correct responses



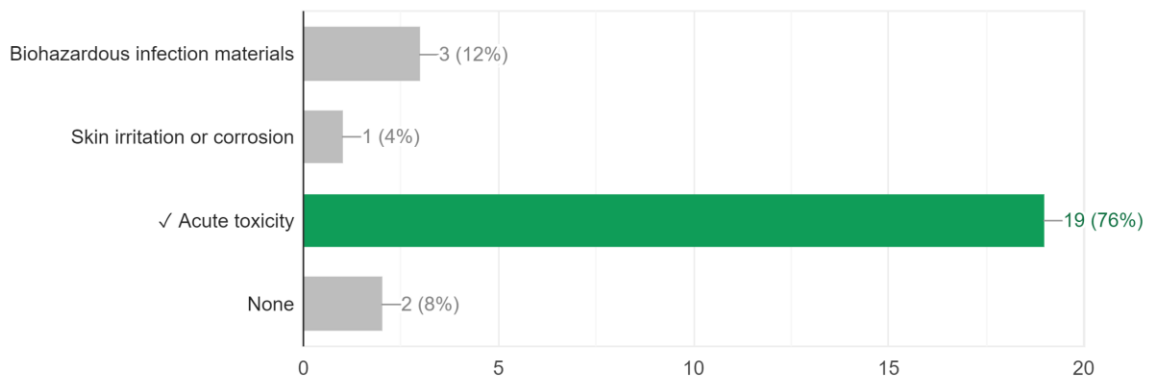
6. The CAS registry number is

25 / 25 correct responses



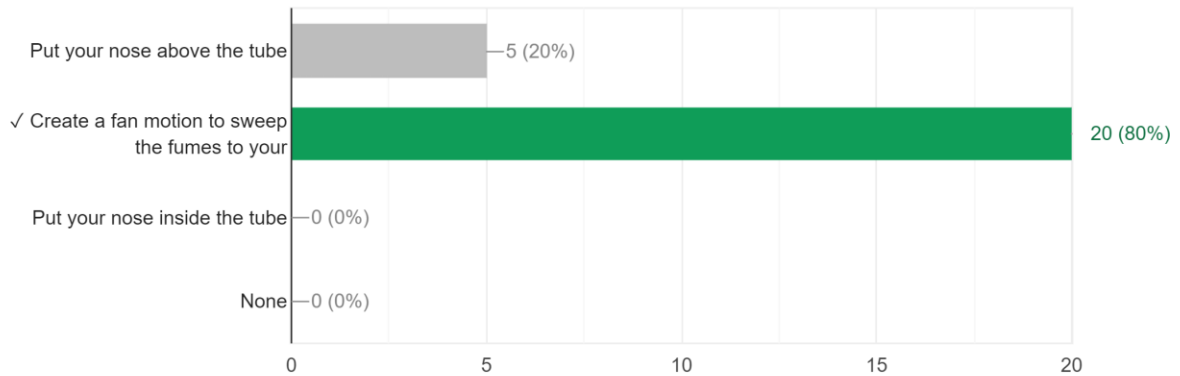
7. The skull and cross bones symbols are used for which type of hazard in laboratory?

19 / 25 correct responses



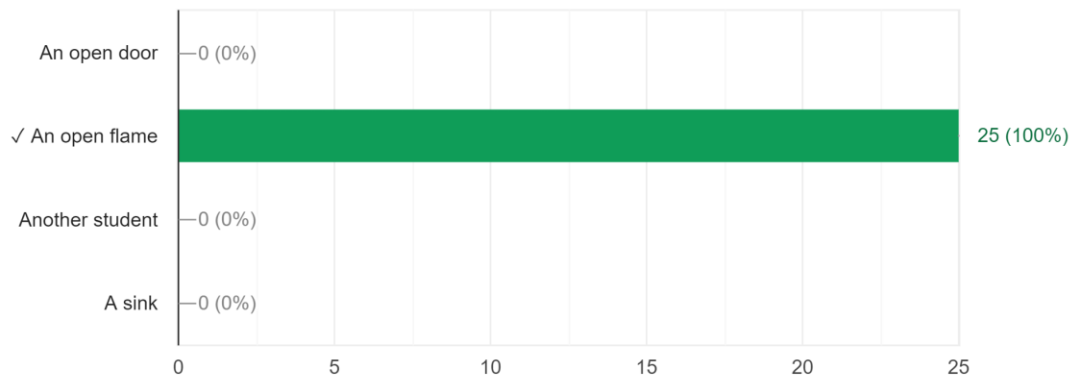
8. What is the right way to smell chemicals inside a tube?

20 / 25 correct responses



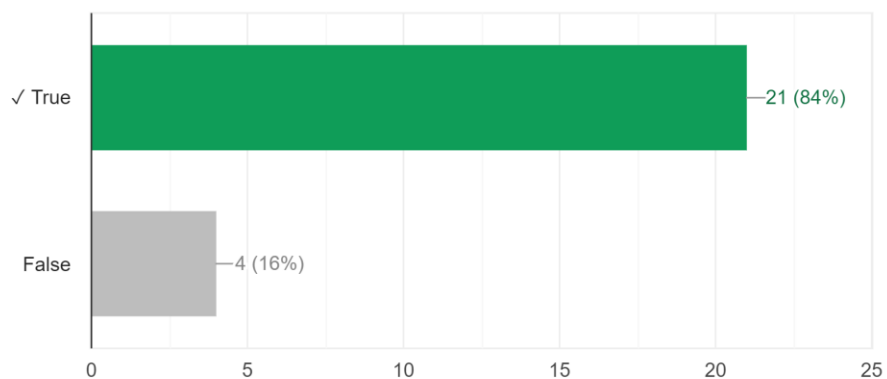
9. Flammable materials, like alcohol, ether should never be used near

25 / 25 correct responses



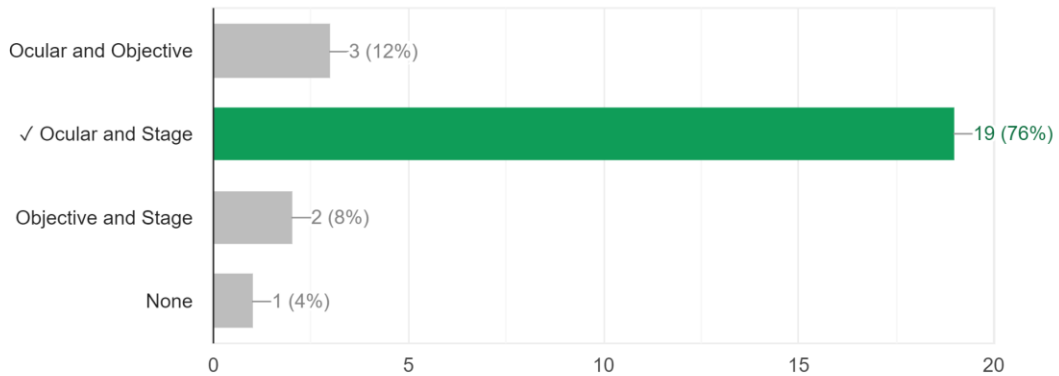
10. Camera Lucida is used to trace an objects magnified image microscopically.

21 / 25 correct responses



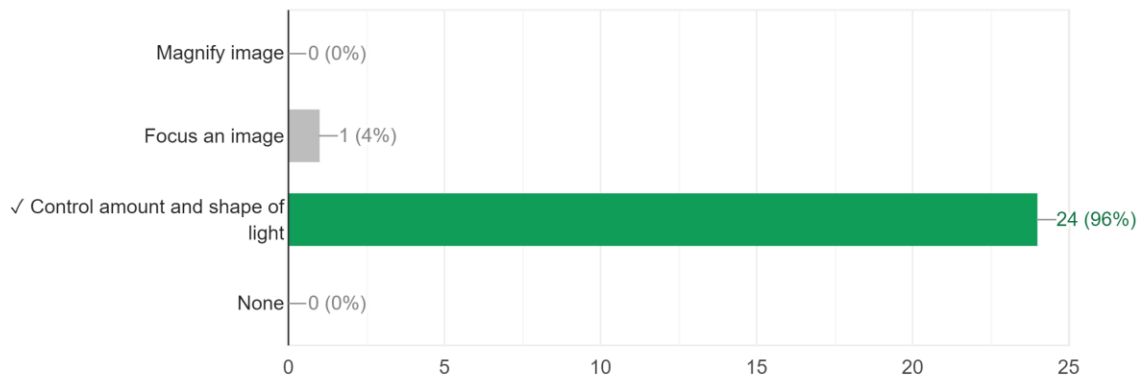
11. For micro-measurements ____ and _____ micrometers are used.

19 / 25 correct responses



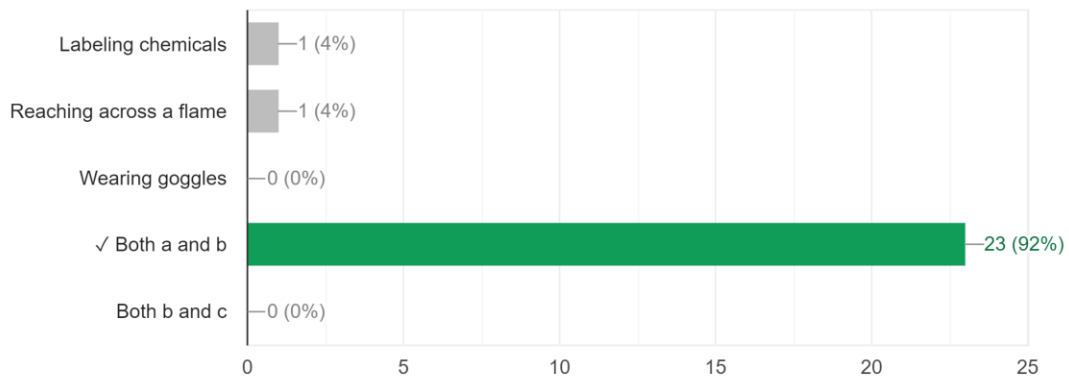
12. Diaphragm in microscope is used to

24 / 25 correct responses



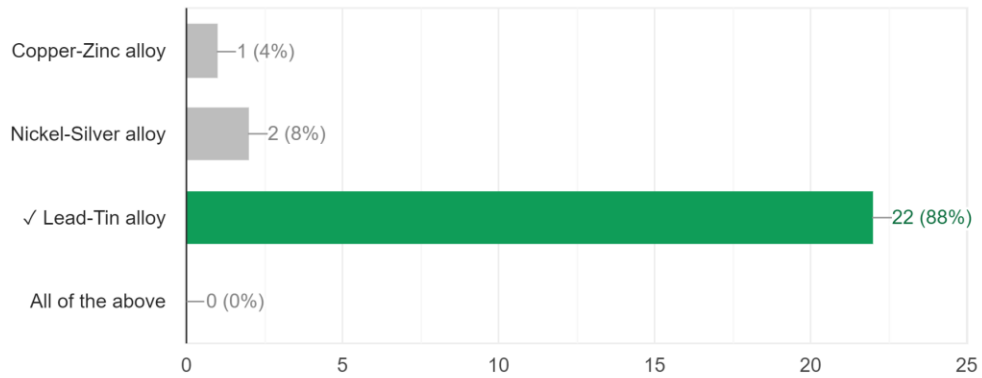
13. In the picture below, what are the students doing incorrectly?

23 / 25 correct responses



14. Which of the following is a soft solder?

22 / 25 correct responses



15. The base of transistor isdoped.

23 / 25 correct responses

