



Year 3/4 Day Tour Activities

Contact: schooltours@perthobservatory.com.au

🔭 Indicates that a telescope is seen or involved

M1. Meteorites and the Moon

The students see the (very large) piece of a meteorite in the Observatory Museum, with a discussion covering the history of the meteorite and the most common origins of meteorites. The students then engage in activities demonstrating the moon phases and why we see them.

M2. Our Solar System

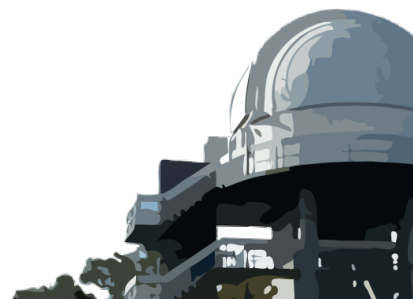
Students will look at the order of the planets in the solar system along a scaled route. This will be followed with an extension activity related to the Solar System.

M3. Sun, Earth and Moon

This activity compares the sizes of the sun, earth and moon and then engages the students in role play to show how the sun, moon and earth interact. An introductory look at the planets is also included with a mnemonic to help remember the order of the planets from the sun

M4. Lowell Telescope 1 📡

This was the main research telescope at the observatory. Students will learn about some aspects of astronomical research and how the telescope works. There will be a discussion about the Mars exploration program and the use of helicopters on Mars, and the student will then make a paper helicopter.





M5. Astrograph 1

By being allowed to move the telescope, students will see how this historical telescope (1896) was still being used in the 1990s for astrophotography. Students are introduced to the long drawn-out process of taking photographs in the past which is compared to modern photography.

M6. Here comes the Sun

(Do not choose M7 if you select this activity)

Weather Permitting. students look at shadows and how they change as the Sun appears to move across the sky. They will then move to our Solar viewing dome, where a telescope trained on the Sun transmits mono real time images via a camera to a computer screen. The students are presented with some limited information about our Sun.

M7. Shadows and Sundials

(Do not choose M7 if you select this activity)

Weather permitting, students look at shadows and how they change as the Sun appears to move across the sky. They examine the observatory sundial and then make a paper sundial of their own which they can use and compare to the time on the Observatory sundial and then take back to school.

M8. Sunshine and Rainbows

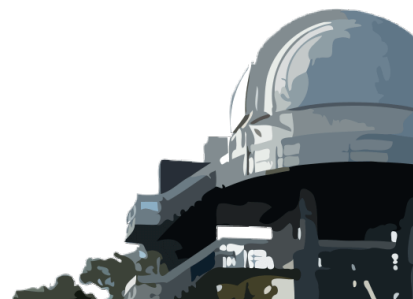
Students use objects to produce rainbows on a screen. The reason for rainbows is discussed the use of and their link to astronomy. The students then have a look at objects through coloured filters to see what happens to the rainbows

Note: If you would like the children to use the 'rainbow glasses' there will be an extra \$1.00 charge per student and the rainbow glasses can be taken home

M10. Telescope Tour

This gives the students an opportunity to look at two or three of the Observatory's old and more modern telescopes and learn a little bit about their history and what they were used for. This is a useful addition if you would like the students to leave having seen some telescopes but your choices do not include any.

Note: If the weather does not allow for outside activities, activities presenting the similar concepts will take place inside the main building. However, if at all possible, some activities will take place in the domes so that students. can see the telescopes. Perth Observatory reserves the right to change or adjust these activities as necessary.





Year 5/6 Day Tour Activities

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U1. Spinning Around

The students see the (very large) piece of a meteorite in the Observatory Museum, with a discussion covering the history of the meteorite and interesting information about them. They then engage in activities that demonstrate moon phases and eclipses.

U2. Solar Walk

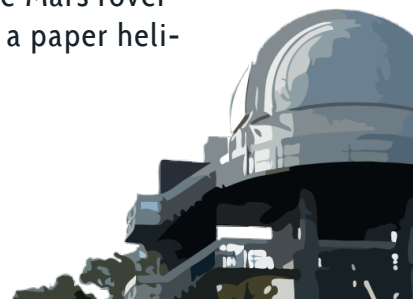
This walk demonstrates the distances between the planets using a scale model with facts about the planets presented as they walk. They then try to fit carded information to the right planet discussing specific aspects of some planets.

U3. Solar Rings

The students use team work to initially sort the planets into order on our solar rings diagram and then work out which orbital times belong to which planet. Students try to work out how old they would be on some of the planets based on the length of the planets' orbits and then have an opportunity to see how old they would be on each of the planets. They then engage in an activity which looks at the sizes of the planets and are given a mnemonic to remember the size order.

U4. Lowell Telescope 2 📡

This was the main research telescope at the observatory. Students will learn about some aspects of astronomical research and how the telescope works. The Mars rover and helicopter exploration will be introduced and the student will make a paper helicopter to drop from one of the Lowell platforms.





U5. Astrograph 2

By being allowed to move the telescope, students will see how this historical telescope (1896) was still being used in the 1990s for astrophotography. Students are introduced to the long, drawn-out process of taking photographs in the past which is compared to modern photography.

U6. Seeing the Sun

(Do not choose M7 if you select this activity)

Weather permitting, students get the opportunity to look at the sun in real time safely in two different ways. The first is using Sunspotters. The students use these instruments to project an image of the sun indirectly onto a piece of white paper. At no stage does the student look at the sun.

The second is using a dedicated solar telescope with inbuilt solar filters and students look through the telescope at the sun. At all times there is an emphasis on safely looking at the sun and student are instructed to never look at the sun through any other telescope. They then engage in a discussion explaining some of the sun's activities.

U7. Solar Scope

(Do not choose M7 if you select this activity)

Weather permitting, the students will be able to learn about and read the observatory's sundial. They will then move to our Solar viewing dome, where a telescope trained on the Sun transmits mono real time images via a camera to a computer screen. They will be given some information about the Coronado (Solar) Telescope and discuss aspects of and the structure of our Sun.

U8. Survival on the Moon

Students learn a bit more about the moon and do a NASA designed activity to see if they and their friends would survive a crash on the moon.

U11. Telescope Tour

This gives the students an opportunity to look at two or three of the Observatory's old and more modern telescopes and learn a little bit about their history and what they were used for. This is a useful addition if you would like the students to leave having seen some telescopes but your choices do not include any.

Note: If the weather does not allow for outside activities, activities presenting the similar concepts will take place inside the main building. However, if at all possible, some activities will take place in the domes so that students can see the telescopes. Perth Observatory reserves the right to change or adjust these activities as necessary.

