



3rd Karratha Dingo Cubs



Date	20 May 2010	Theme: Science	Leader in charge: Kaa (Ric Prisk)
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5.30 pm

Cubs arrive at Hall and proceed immediately to six corners.

- Duty six prepare flag. Duty Six **Yellow**
- All sixers / seconders carry out inspection with Leaders assistance in six corners.

5.35 pm

Opening parade

- Call Pack ***Pack-Pack-Pack*** (Forms at ease).
 - ***Pack Alert.***
 - Grand Howl.
 - Sixer moves to the front of the pack.
 - ***Duty sixer Prepare to break the flag.*** Duty sixer takes place at base of flag staff.
 - ***Pack Face the Flag – Pack Salute as flag breaks.*** At Pack salute duty sixer breaks flag then takes 2 steps back, salutes the flag then returns to their six.
 - ***Pack Inward Turn - Pack at ease (End of formal parade)***
 - Promise led by sixer –

<u>The Cub Scout Promise</u>
On my honor
I promise that I will do my best
To do my duty to my God, and
To the Queen of Australia
To help other people, and
To live by the Cub Scout Law.
 - Inform Theme
- Spend 5 Minutes on SAFETY. Fire, Hot kitchen appliances, and Electricity.***
- Boomerangs – Bronze 7.5-8.5, Silver 8.5-9.5, and Gold 9.5 +***
- ***Pack Alert – Pack Break off.***

5.40 pm ***Break off into Boomerangs – Bronze 7.5-8.5, Silver 8.5-9.5, and Gold 9.5 +***

Activity Station 1 – Airtime: Bronze.

Items required: tea light candles, 6-8 various sizes of jars, matches.

IMPORTANT: Light the match correctly & safely. Ask Cubs for their predictions.

Place candles in a row and light them. Once alight, cubs to place jars over candles and time how long the candles burn. Ask cubs to explain why some candles extinguish quicker than others. Can they see the relation in the burn time vs. jar volume?

Activity Station 2 – It’s a long shot: Bronze.

Items required: 30m tape, calculator, paper, pens and 30cm rule.

- i) Get cubs to measure their feet, and then document their findings. Ask the cubs to guess how wide the scout hall is using their feet as 1 unit. *Scout hall 9.6m wide.*
- ii) Have the cubs measure the span of their fingers and document their answers. Estimate the height of a fellow cub using their hand span as 1 unit.

Activity Station 3 – Hovering Madness: Bronze.

Items required: Plastic plate, bottle caps, drawing pin, glue gun and balloon.

Glue the plastic cap centrally onto the bottom of the plate. Once glue has set, pop some holes through the plate where you glued the cap on. This will allow the air to pass through from the balloon. Inflate the balloon and pinch off end while placing the balloon end over the bottle cap. Place the mad hoverer onto the table (plate down) and let it rip.

Activity Station 4 – This sucks: Bronze.

In this experiment a flat wooden stick is laid on the table with half of it hanging over the edge. A few news paper sheets are flattened and laid over the wooden stick. Ask Cubs to push on stick and lift the paper. Ask if they reckon that you can break the stick. **KEEP CUBS OUT OF LINE OF FIRE.** Re flatten paper and hit the over hanging stick as fast and hard as possible. The wood should break at the edge of the table. If it did not the stick will have flown off and hit some one which means you did not hit it fast enough. How this works is lifting the paper slowly the air has time to rush in, if it is hit fast and hard the air does not have time to be drawn under the paper causing a vacuum which stops the stick from moving.

Activity Station 5 – Solids Liquids & Gasses: Silver.

Items required: Ice blocks, pots and kitchen.

- i) Heat up pan and drop an ice block in, ask cubs to explain the solid, liquid and gas stages.
- ii) Ask cubs to think of the quickest way to melt an ice block using their body. See what answers they can come up with. Give cubs an ice block each to carry out their theory.

Activity Station 6 – The next level of measurement: Silver.

Items required: 30m tape, paper and pen.

- i) Show the cubs some thing 1m long (tape). Ask the cubs to guess the distance from the hall door to fence post on RHS of entrance. *Distance is 27.7m.*
- ii) Ask the cubs ways to estimate the height of the flag pole in the car park. *Pole height 5.1m.*

Activity Station 7 – Oh for the life of a Butterfly: Silver.

See attachments.

Activity Station 8 – Sounds like: Gold.

Items required: 8 beer bottles, water, small tapping stick, 8 wooden rulers.

- i) Fill bottles with different levels of water. Ask cubs to gently tap them. What are their observations? Why does this happen?
- ii) Tap on the bench lightly. Then ask cubs to place their ears onto the desk. Tap lightly again and ask cubs to explain what they heard and any difference in noise level.

Activity Station 9 – Not too lost with out the compass: Gold.

Items required: Nil

Ask cubs if they know of two ways to find their direction at night and day without a compass or GPS. *Work sheets attached.*

Activity Station 10 – Make Compass: Gold.

Items required: bowl, pin, magnet, cork/balsa, water.

Construct a compass by stroking a pin with the north end of a magnet thirty times. Place pin on the cork/balsa in a bowl of water. Have cubs explain what is happening and which way is North, south, east & west.

Activities for all Cubs

Activity Station 11 – Violent Eruptions: All Cubs.

Make a volcano erupt using house hold goods. Mentos & Coke?

Activity Station 12 – What glows and why?: All Cubs.

Using UV globes Cubs can see what will glow and what does not.

6.55 PM CUB HALL CLEANUP

Closing Parade (Ref. Ceremonies ISBN 1 92074506 8)

- Call Pack ***Pack-Pack-Pack*** (Forms at ease)
- **Notices**
- Cub Scout Law

The Cub Scout Law

Cub Scouts are loyal and obedient.
Cub Scouts do not give into themselves

- ***Pack Alert.***
- Grand Howl
- ***Duty sixer Prepare for flag down.*** Duty sixer and seconder take station at base of Flag and prepare for flag down.
- ***Pack Face the Flag – Pack Salute.***
- At Pack salute duty sixer salutes briefly then lowers the flag steadily into the seconders arms. When flag at lowest point Leader stops salute and all cubs follow CSL lead.
- ***Pack Inward Turn - Pack at ease.***
- Cub Scout Prayer

The Cub Scout Prayer

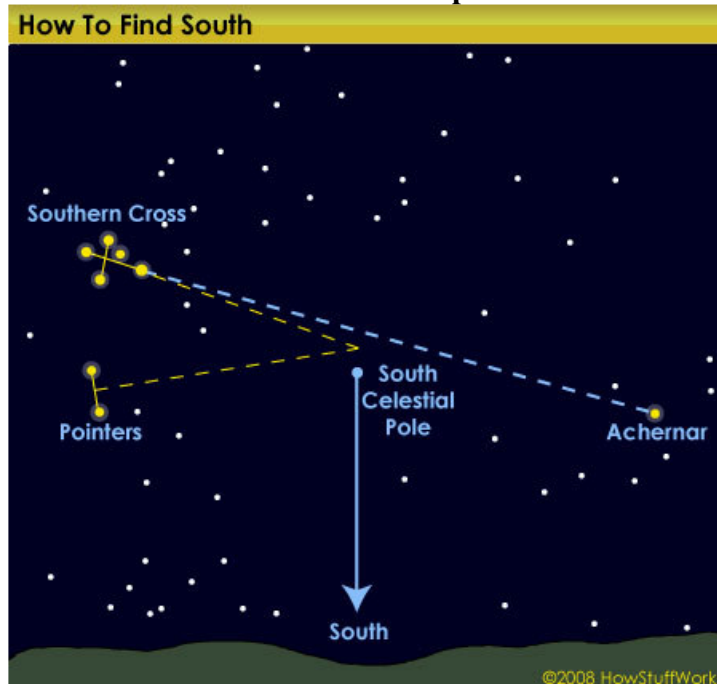
Help us O Lord,
To serve thee day by day
To do our duty and to enjoy our play
To keep our cub scout promise, then to rest
Happy that we have tried to do our best.

- ***Pack Alert – Pack Dismissed.*** Duty six fold flag.



Activity Station 3 – Hovering Madness: Bronze.

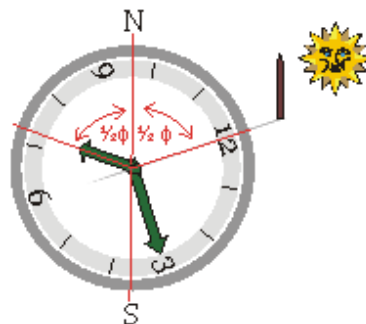
Activity Station 8 – Not too lost with out the compass: Gold.



In the Southern Hemisphere, the Southern Cross constellation points you to south. The Southern Cross constellation can provide a good approximation of where south lies. Locate the constellation and the two pointer stars at the tip of it, and then extend that line about five times its original length. At that point, drop down an imaginary perpendicular line to the earth, and that marks south.

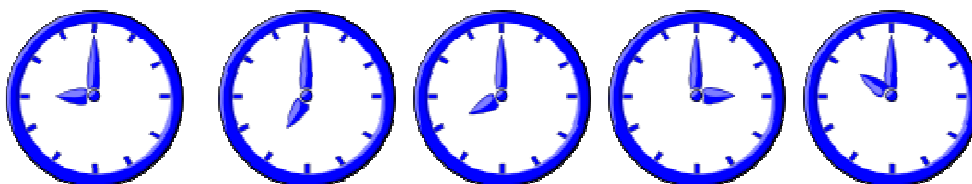
Find True North - the scout's way

A compass will only give you an approximate reading for north since the magnetic field of the earth is not perfectly aligned with the planet's poles. The magnetic field also changes with time. You can quickly find "True North" using an analog watch and a tooth pick or small straight twig.



Place the watch on a level piece of ground. Point the figure 12 towards the sun. For more accuracy, align the shadow cast by the twig with the 12 o'clock line. The North-South line is the line dividing the angle between the hour hand and the 12 o'clock line in half.

Note:
This method does not work if your watch is set to day light savings time.



Items needed

Activity 1- Tea light candles, 6-8 Jars (various sizes), Matches/lighter.

Activity 2- 30mt tape, Calculator, Pens & Paper, 30cm Rulers.

Activity 3- Plastic plates, Bottle caps, Drawing pins, Glue gun.

Activity 4- Newspaper, Wooden slats.

Activity 5- Ice blocks, Pots & kitchen.

Activity 6- 30mt tape, Calculator, Pens & Paper, 30cm Rulers.

Activity 7-

Activity 8- 8 Beer/wine bottles.

Activity 9-

Activity 10- Bowls for compass, Pins (all metal), Magnets, Cork/balsa.

Activity 11-

Activity 12- UV Black light, Paper, Highlighter, Mustard, ask Cubs to bring in an item that they are curious about.

Activity 13-

Make a Compass

Overview:

Make a simple compass to find magnetic north, or south, depending on where you live.

Equipment:

1. Sewing needle ~1 inch (3cm?) long.
2. Small bar magnet. Refrigerator magnets may work if you don't have a bar magnet.
3. A small piece of cork.
4. A small glass or cup of water to float the cork and needle.

Safety:

Needles are sharp.. Treat appropriately.

How to do the experiment:

1. Your compass will work better if you first run a magnet over the needle a few times, always in the same direction. This action 'magnetizes' is to some extent. Drive the needle through a piece of cork. Cork from wine bottles works well. Cut off a small circle from one end of the cork, and drive the needle through it, from one end of the circle to the other, instead of through the exact middle – be careful not to stick yourself!
2. Float the cork + needle in your cup of water so the floating needle lies roughly parallel to the surface of the water.
3. Place your 'compass' on a still surface and watch what happens. The needle should come to point towards the nearest magnetic pole – north or south as the case may be.
4. If you want to experiment further, try placing a magnet near your compass and watch what happens. How close/far does can the magnet be to cause any effects?

Explanation:

The earth produces a magnetic field. This field, although weak, is sufficient to align iron and other **paramagnetic** compounds such as your needle within it. By floating the needle on the cork, you let it rotate freely so it can orient itself within the earth's magnetic field, to point toward the north or south poles of the planet.

Useful References:**Further comments:**

Try some of the files on this site discuss the nature of the earth's magnetic field and how it is produced.