## The Empty Box Candle Snuffer

**The Action** Blow out a candle by using nothing but an empty

box!

<u>Grade</u> Level Grade 2 – Air and Water

Materials Empty shoe box

Birthday candle

Matches Masking tape

**Instructions** Show an open, empty box to the students and ask,

"What is in the box?" (Anticipated answer:

nothing!)

Make a small hole in the side of the box (about  $\frac{1}{2}$  cm in diameter) at the same height as the birthday

candle to be used.

Tape the top of the box shut.

Light the birthday candle and place it 5 cm away

from the box in front of the hole.

Hit the box top (with an open hand) with a sudden

tap.

The lighting and snuffing of the candle may be

repeated by repeating the above two steps.

**Safety** Care must be taken as fire is involved so take

precautions to not burn yourself.

**Hints** If the candle doesn't snuff out with the first sudden

tap on the top of the box, the box may be too far away from the candle. Simply, move the box a little

closer (approx. 5 cm).

**Science** The shoebox is occupied with air and by tapping the top of it; the air was forced through the little

the top of it; the air was forced through the little hole, blowing the flame out, just like when we

pucker up our lips to blow out a candle. By tapping

the box, the volume of it suddenly becomes

smaller for a short moment and this action forces the air out. This shows that air is occupying all the

space around us, even in an empty box.