



SLEUTH SCIENCE

Create secret messages and investigate. Become a sleuth with these mysterious activities.

This week's activities: Invisible Ink – Fingerprint Dusting

Invisible Ink

Suggested Materials:

- 2 tbsp baking soda
- ½ cup water
- Bowl
- Paper
- Cotton swab (or paint brush)
- Grape juice (or 1 tsp turmeric and ½ cup water stirred together)

Directions:

1. Stir baking soda into water in your bowl
2. Using a cotton swap, write a message on your paper.
3. When dry, paint on some grape juice with a paint brush. Did your message appear?



Fingerprint Dusting

Suggested Materials:

- Flour (or cornstarch)
- Cocoa powder
- Black construction paper
- White paper
- Glass
- Small bowl
- Spoon
- Paintbrush
- Tape (packing tape or clear tape)

Examine Fingerprints Using Flour

1. Place a spoonful of flour into a bowl.
2. Rub hands together then place a finger in the bowl to cover with flour. Gently shake off excess flour.
3. Press finger onto black paper and examine the swirls of your fingerprint.

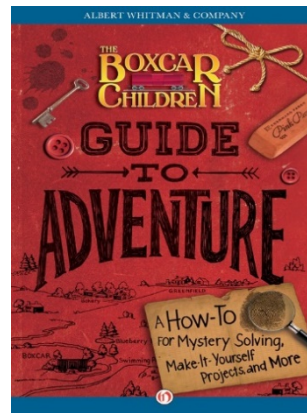
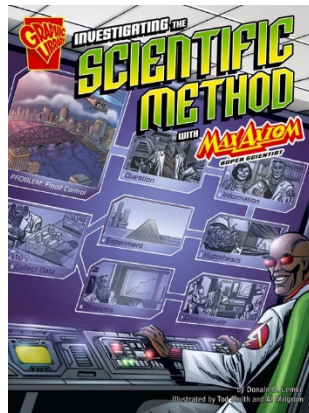
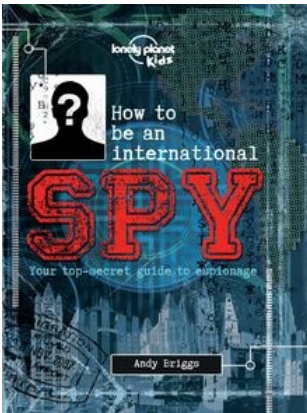


Examine the Fingerprints Using Cocoa Powder

1. Place a spoonful of cocoa powder in a bowl.
2. Press your finger or thumb onto a glass (to leave a fingerprint).
3. Dip your paintbrush into the cocoa powder and very gently brush the fingerprint on the glass. Gently blow or shake off excess powder.
4. Holding a piece of tape carefully, press it on to the fingerprint (without letting go of the tape entirely).
5. Place the tape onto a white piece of paper and examine.

Links to eResources:

Check out our [eBooks](#) on these topics:



[Spy](#) | [Investigation](#) | [Mystery](#)

Watch how Joe and Jack solve the mystery of the missing socks in Episode 12 Season 1 of *Joe and Jack* on [KanopyKids](#).

Read *Poppy & Sam and the Leaf Thief* on [TumbleBooks](#). You can also find the adventures of *Tank and Fizz*, monster detectives, on [Tumblebooks](#).

You can get a library card at hpl.ca/online-register.

If you would like to share one or all your creations, please take a picture and post it to social media using the hashtag, #HPLmakesomething.



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