

# CURRICULUM LINKS



YOU KNOW THE ABILITIES AND INTERESTS OF YOUR STUDENTS BEST. USE THIS CHART TO FIND EXHIBITS, SHOWS AND FILMS THAT COMPLEMENT THE BC CURRICULUM FOR **GRADE 5** AS YOU PLAN A COMPLETE DAY AT TELUS WORLD OF SCIENCE.

|                                     | ABERDEEN WORKSHOPS  | SCIENCE WORLD WORKSHOPS                         | PETER BROWN FAMILY CENTRE STAGE                 | EXHIBITS   | OMNIMAX(+) THEATRE                           | SCIENCE THEATRE                                 |
|-------------------------------------|---|---|---|--|--|---|
|                                     | Located in Richmond   | Included in admission to TELUS World of Science | Included in admission to TELUS World of Science | Included in admission to TELUS World of Science  | Must be prebooked Add \$4.00 per person      | Included in admission to TELUS World of Science |
|                                     | Look for the Workshop Supplement included in your Field Trip Planner. |   |   | Please call 604-443-7500 or refer to <a href="http://scienceworld.ca">scienceworld.ca</a> for up-to-date showtimes for Science Theatre and OMNIMAX® shows. |  |   |
| HUMAN BODY                          | ✓   |   | ✓   | ✓  | ✓  |   |
|                                     | <i>Grossology</i>   |   | <i>Science of Sport</i> (12:20 pm)              | <i>Body Works</i><br><i>Illusions</i>  | <i>The Human Body</i><br><i>To The Limit</i> |   |
| FORCES AND SIMPLE MACHINES          |   |   | ✓   | ✓  |  |   |
|                                     |   |   | <i>Science of Sport</i> (12:20 pm)              | Mitchell Odyssey Foundation Gallery: Eureka!   |  |   |
| RENEWABLE & NON-RENEWABLE RESOURCES |   | ✓   |   |  | ✓  | ✓   |
|                                     |   | <i>Thinking Green</i>                           |   |  | <i>Ultimate Wave Tahiti</i>                  | <i>Burns Bog - A Road Runs Through It</i>       |
| MUSIC                               |   | ✓   |   |  | ✓  |   |
|                                     |   | <i>Feel The Beat</i>                            |   |  | <i>Pulse: A STOMP Odyssey</i>                |   |

## 5

**WITH YOUR STUDENTS, DISCUSS YOUR SCHEDULE FOR THE DAY AND THE WORKSHOPS, SHOWS OR FILMS YOU PLAN TO ATTEND. DIVIDE STUDENTS INTO GROUPS WITH ONE ADULT ASSIGNED TO EACH GROUP. TRY THE FOLLOWING ACTIVITY TO KICK START YOUR STUDENTS' CREATIVITY.**

### ... BEFORE

#### CURRICULUM LINKS

Human Body  
Processes & Skills of Science

### THINK LIKE A SCIENTIST: MEASURE YOUR REACTION TIME

#### What you need (for each student):

- » copy of reaction timer template (on back of sheet)
- » ruler or strip of stiff cardboard

#### What to do:

1. Cut out the reaction timer.
2. Glue or tape it to a piece of stiff cardboard or a ruler.

#### To test your reaction time:

1. Rest your arm on a desk with your index finger and thumb stretched out.
2. Have a friend hang the reaction timer so the 'start' mark is lined up with your finger and thumb.
3. Your friend should drop the reaction timer without warning you. Try to catch the timer as quickly as possible.
4. Read the mark closest to your finger where you caught the timer.

#### What's happening:

When your friend drops the timer, you see it start to move. A nerve signal travels from your eye to your brain then to your finger muscles. Your finger muscles move to catch the timer. The whole process takes between 150 and 220 milliseconds.

#### What to do next:

There are a lot of interesting questions you can ask about reaction time. Pick one or ask one of your own and design an experiment to find out the answer.

- » Do adults react more quickly or more slowly than kids?
- » Does your reaction time improve with practice?
- » Do students who play sports have faster reaction times?
- » Do students who play musical instruments have faster reaction times?
- » How does your reaction time change if you use your peripheral vision?

**CURRICULUM LINKS**

Light & Sound

**RESOURCES**

**Classroom Activities**

*Science Is* by Sandra Bosak  
(Scholastic, 1991)

**References**

*Conceptual Physics*  
by Paul Hewitt

*The Way Things Work*  
by David MacAulay

**Sound**

exploratorium.edu/listen/index.php  
*Classroom & Online Activities*, short  
videos about sound and listening

**TRY THIS AT SCHOOL: BUILD YOUR OWN BODYWORKS**

Create your own human performance challenges and experiments for your classmates.

**What you need:**

- » stopwatch
- » metre stick
- » sticky notes
- » reaction timer
- » paper and drawing materials

**What to do:**

1. Brainstorm ways in which you can make versions of the BodyWorks challenges using simple equipment.
2. Set up the challenges in a gym or playing field and invite other classes to participate.
3. Keep records of people’s scores. Use these statistics to answer questions like: can Grade 5’s jump higher than Grade 4’s? Do students have steadier hands than teachers?

**Here are some suggestions for stations:**

**Reaction time:** Use the reaction timer you made before you visited TELUS World of Science.

**Balance:** How long can you balance an upside-down broom on the palm of your hand? How long can you stay upright on a balance board?

**Endurance:** How long can you hold a ball over your head?

**Leg Strength:** Hold a sticky note in your hand and jump to stick it to the wall. How high can you place the note?

**Flexibility:** Can you fit into a cardboard computer box?

**Steadiness of Hand:** Draw a simple maze and make many copies. How long does it take to draw your way through a maze with a fat marker? Deduct points if you hit the lines.

| Seconds |
|---------|
| 0.20    |
| 0.19    |
| 0.18    |
| 0.17    |
| 0.16    |
| 0.15    |
| 0.14    |
| 0.13    |
| 0.12    |
| 0.11    |
| 0.10    |
| 0.09    |
| 0.08    |
| 0.06    |
| 0.04    |
| 0.02    |

**start here** ←

