Main Criteria: Forward Education
Secondary Criteria: British Columbia Curriculum
Subjects: Mathematics, Science, Technology Education
Grades: 5, 6, Key Stage 2

Forward Education

How Wind Turbines Capture Kinetic Energy

British Columbia Curriculum
Mathematics
Grade **5** - Adopted: **2016**

CURRICULUM ORGANIZER / COURSE	BC.MA.5.CC.	Curricular Competencies
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following:**
EXPECTATION / SUB ORGANIZER	**5.CC.1.**	**Reasoning and analyzing**
PRESCRIBED LEARNING OUTCOME	5.CC.1.1.	Use reasoning to explore and make connections
PRESCRIBED LEARNING OUTCOME	5.CC.1.5.	Model mathematics in contextualized experiences

CURRICULUM ORGANIZER / COURSE	BC.MA.5.CC.	Curricular Competencies
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following:**
EXPECTATION / SUB ORGANIZER	**5.CC.2.**	**Understanding and solving**
PRESCRIBED LEARNING OUTCOME	5.CC.2.1.	Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving
PRESCRIBED LEARNING OUTCOME	5.CC.2.3.	Develop and use multiple strategies to engage in problem solving
PRESCRIBED LEARNING OUTCOME	5.CC.2.4.	Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures

CURRICULUM ORGANIZER / COURSE	BC.MA.5.CC.	Curricular Competencies
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following:**

EXPECTATION / SUB ORGANIZER	**5.CC.3.**	**Communicating and representing**
PRESCRIBED LEARNING OUTCOME	5.CC.3.1.	Communicate mathematical thinking in many ways
PRESCRIBED LEARNING OUTCOME	5.CC.3.3.	Explain and justify mathematical ideas and decisions

CURRICULUM ORGANIZER / COURSE	**BC.MA.5.CC.**	**Curricular Competencies**
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following:**
EXPECTATION / SUB ORGANIZER	**5.CC.4.**	**Connecting and reflecting**
PRESCRIBED LEARNING OUTCOME	5.CC.4.1.	Reflect on mathematical thinking
PRESCRIBED LEARNING OUTCOME	5.CC.4.2.	Connect mathematical concepts to each other and to other areas and personal interests

CURRICULUM ORGANIZER / COURSE	**BC.MA.5.C.**	**Content**
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to know the following:**
EXPECTATION / SUB ORGANIZER	5.C.8.	Addition and subtraction facts to 20 (extending computational fluency)

British Columbia Curriculum

Mathematics

Grade **6** - Adopted: **2016**

CURRICULUM ORGANIZER / COURSE	**BC.MA.6.CC.**	**Curricular Competencies**
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following:**
EXPECTATION / SUB ORGANIZER	**6.CC.1.**	**Reasoning and analyzing**
PRESCRIBED LEARNING OUTCOME	6.CC.1.1.	Use logic and patterns to solve puzzles and play games

PRESCRIBED LEARNING OUTCOME	6.CC.1.2.	Use reasoning and logic to explore, analyze, and apply mathematical ideas
PRESCRIBED LEARNING OUTCOME	6.CC.1.6.	Model mathematics in contextualized experiences

CURRICULUM ORGANIZER / COURSE	**BC.MA.6.CC.**	**Curricular Competencies**
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following:**
EXPECTATION / SUB ORGANIZER	**6.CC.2.**	**Understanding and solving**
PRESCRIBED LEARNING OUTCOME	6.CC.2.1.	Apply multiple strategies to solve problems in both abstract and contextualized situations
PRESCRIBED LEARNING OUTCOME	6.CC.2.2.	Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving
PRESCRIBED LEARNING OUTCOME	6.CC.2.4.	Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures

CURRICULUM ORGANIZER / COURSE	**BC.MA.6.CC.**	**Curricular Competencies**
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following:**
EXPECTATION / SUB ORGANIZER	**6.CC.3.**	**Communicating and representing**
PRESCRIBED LEARNING OUTCOME	6.CC.3.2.	Explain and justify mathematical ideas and decisions
PRESCRIBED LEARNING OUTCOME	6.CC.3.3.	Communicate mathematical thinking in many ways

CURRICULUM ORGANIZER / COURSE	**BC.MA.6.CC.**	**Curricular Competencies**
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following:**

EXPECTATION / SUB ORGANIZER	**6.CC.4.**	**Connecting and reflecting**
PRESCRIBED LEARNING OUTCOME	6.CC.4.1.	Reflect on mathematical thinking
PRESCRIBED LEARNING OUTCOME	6.CC.4.2.	Connect mathematical concepts to each other and to other areas and personal interests

British Columbia Curriculum

Science

Grade **5** - Adopted: **2016**

CURRICULUM ORGANIZER / COURSE	**BC.SC.5. BI.**	**Big Ideas**
PRESCRIBED LEARNING OUTCOME / ORGANIZER	5.BI.3.	Machines are devices that transfer force and energy.

CURRICULUM ORGANIZER / COURSE	**BC.SC.5. CC.**	**Curricular Competencies**
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following**
EXPECTATION / SUB ORGANIZER	**5.CC.2.**	**Planning and conducting**
PRESCRIBED LEARNING OUTCOME	5.CC.2.4.	Observe, measure, and record data, using appropriate tools, including digital technologies

CURRICULUM ORGANIZER / COURSE	**BC.SC.5. CC.**	**Curricular Competencies**
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following**
EXPECTATION / SUB ORGANIZER	**5.CC.5.**	**Applying and innovating**
PRESCRIBED LEARNING OUTCOME	5.CC.5.2.	Co-operatively design projects
PRESCRIBED LEARNING OUTCOME	5.CC.5.3.	Transfer and apply learning to new situations

PRESCRIBED LEARNING OUTCOME	5.CC.5.4.	Generate and introduce new or refined ideas when problem solving

CURRICULUM ORGANIZER / COURSE	BC.SC.5.CC.	Curricular Competencies
PRESCRIBED LEARNING OUTCOME / ORGANIZER		Students are expected to be able to do the following
EXPECTATION / SUB ORGANIZER	5.CC.6.	Communicating

PRESCRIBED LEARNING OUTCOME	5.CC.6.1.	Communicate ideas, explanations, and processes in a variety of ways

CURRICULUM ORGANIZER / COURSE	BC.SC.5.C.	Content
PRESCRIBED LEARNING OUTCOME / ORGANIZER		Students are expected to know the following

EXPECTATION / SUB ORGANIZER	5.C.3.	Properties of simple machines and their force effects

CURRICULUM ORGANIZER / COURSE	BC.SC.5.C.	Content
PRESCRIBED LEARNING OUTCOME / ORGANIZER		Students are expected to know the following
EXPECTATION / SUB ORGANIZER	5.C.4.	Machines

PRESCRIBED LEARNING OUTCOME	5.C.4.1.	Constructed

British Columbia Curriculum

Science

Grade **6** - Adopted: **2016**

CURRICULUM ORGANIZER / COURSE	BC.SC.6.CC.	Curricular Competencies
PRESCRIBED LEARNING OUTCOME / ORGANIZER		Students are expected to be able to do the following
EXPECTATION / SUB ORGANIZER	6.CC.2.	Planning and conducting

PRESCRIBED LEARNING OUTCOME	6.CC.2.4.	Observe, measure, and record data, using appropriate tools, including digital technologies

CURRICULUM ORGANIZER / COURSE	BC.SC.6.CC.	Curricular Competencies
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following**
EXPECTATION / SUB ORGANIZER	**6.CC.5.**	**Applying and innovating**

PRESCRIBED LEARNING OUTCOME	6.CC.5.2.	Co-operatively design projects
PRESCRIBED LEARNING OUTCOME	6.CC.5.3.	Transfer and apply learning to new situations
PRESCRIBED LEARNING OUTCOME	6.CC.5.4.	Generate and introduce new or refined ideas when problem solving

CURRICULUM ORGANIZER / COURSE	BC.SC.6.CC.	Curricular Competencies
PRESCRIBED LEARNING OUTCOME / ORGANIZER		**Students are expected to be able to do the following**
EXPECTATION / SUB ORGANIZER	**6.CC.6.**	**Communicating**

PRESCRIBED LEARNING OUTCOME	6.CC.6.1.	Communicate ideas, explanations, and processes in a variety of ways