

# Change Can Be Good

长大都会变

## Module Overview

<b>Target Language:</b> Chinese	<b>Grade Level:</b> K-1
<b>Proficiency Level:</b> Junior Novice Low	
<b>Summary:</b> Students will observe and tell how frogs, butterflies and human beings grow and change.	
<b>Enduring Understanding:</b> Living things change as they grow and develop.	
<b>Essential Questions:</b> How do living things change? How do I change as I grow?	

Standards Targeted	
<b>5C – World Language Standards</b>	<b>5E – STEM Standards</b>
<p><b>Communication</b></p> <ul style="list-style-type: none"> <li>Ask and answer simple questions related to life cycles of a frog, a butterfly and a human (1.1)</li> <li>Understand and interpret the target language in its spoken and written form on learned topics (1.2)</li> <li>With visual aids and the support of a teacher, tell a brief story about the life cycle of a frog, a butterfly and a human (1.3)</li> </ul> <p><b>Connections</b></p> <ul style="list-style-type: none"> <li>Name the stages of the life cycle of a frog, a butterfly and a human (3.1; see STEM standards)</li> </ul> <p><b>Comparisons</b></p> <ul style="list-style-type: none"> <li>Students demonstrate understanding of the nature of language through comparisons of English and target language (4.1)</li> </ul> <p><b>Community</b></p> <p>Perform songs in the target language (5.1)</p>	<p><b>1.SF Structure and Function</b></p> <p>Students who demonstrate understanding can:</p> <ul style="list-style-type: none"> <li>a. Observe and analyze the external structures of animals to explain how these structures help the animals meet their needs.</li> <li>b. Make observations to explain that animals, including people, have body parts that they use to obtain and convey information, which the animal responds to with behaviors that help them grow and survive.</li> <li>e. Gather and use data to explain that young animals and plants grow and change, and not all individuals of the same kind look exactly the same.</li> </ul> <p><b>Math Common Core</b></p> <p>Sort objects into categories and compare quantities</p> <ul style="list-style-type: none"> <li>PK. MD 4 Ability to sort objects into categories and then compare the categories.</li> <li>PK. G.4 Ability to describe three-dimensional objects using vocabulary such as size,</li> </ul>

## Change Can Be Good

长大都会变

shape, color, corners, edges, and/or

Knowledge: Students will know...	Skills: Students can...
<p>Vocabulary</p> <ul style="list-style-type: none"> <li>Recognize words related to the stages in the life of a butterfly, a frog, and a human.</li> </ul> <p>Expressions and patterns:</p> <ul style="list-style-type: none"> <li>Where and what patterns</li> <li>More or less</li> <li>Be able to make simple statements</li> <li>Be able to ask and answer simple questions</li> </ul>	<ol style="list-style-type: none"> <li>Tell that living creatures go through stages.</li> <li>Name the stages in the life cycle of a butterfly, a frog, and a human.</li> </ol>

**Module Duration and Lessons:** Five 30-minute lessons

Lesson 1 - The Life Cycle of a Butterfly 蝴蝶的生命周期

Lesson 2 - The Life Cycle of a Frog 青蛙的生命周期

Lesson 3 - The Life Cycle of a Human 人的生命周期

Lesson 4 - Same but Different 一樣但是又不一樣

Lesson 5 - Hear My Voice! – Assessment (Identify the life cycles of these species)

<p><b>Performance Assessment:</b></p>	<p>What culminating performance tasks will provide evidence that students have achieved the program learning objectives? Consider providing opportunities for students to be assessed for each mode of communication through interpretive, interpersonal and presentational performance tasks. However, for students at this age group, assessment may be integrated.</p>
---------------------------------------	---

**Materials/Resources:**

- <http://www.teachingheart.net/veryhungrycaterpillar.html>
- <http://www.enchantedlearning.com/coloring/lifecycles.shtml>
- [http://www.ourclassweb.com/projects/webquest\\_frogs\\_science\\_journal.pdf](http://www.ourclassweb.com/projects/webquest_frogs_science_journal.pdf)  
(Image of frog cycle)
- <http://ethemes.missouri.edu/themes/407>  
(Dance of the butterfly and build your own caterpillar)
- <http://www.valdosta.edu/~vlstout/topic.html>
- (Life cycles of animals: do you want to watch me grow?)
- [http://wikieducator.org/Crawling\\_to\\_Flying:\\_The\\_Life\\_Cycle\\_of\\_a\\_Butterfly](http://wikieducator.org/Crawling_to_Flying:_The_Life_Cycle_of_a_Butterfly)  
(Using *The Very Hungry Caterpillar*)
- [http://teacher.scholastic.com/lessonrepro/lessonplans/profbooks/life\\_cycleactivities.pdf](http://teacher.scholastic.com/lessonrepro/lessonplans/profbooks/life_cycleactivities.pdf)  
(Mini-books for from caterpillar to butterfly, etc.)

## Change Can Be Good

长大都会变

- <http://teacher.scholastic.com/lessonrepro/lessonplans/profbooks/tadpole.pdf>  
(Tadpole transformation)
- [http://www.kellykindergarten.com/science/science\\_center\\_activities.htm](http://www.kellykindergarten.com/science/science_center_activities.htm)

- <http://www.enchantedlearning.com/coloring/lifecycles.shtml>
- Worksheets 1a, 1b, 1c
- Large paper
- Coloring materials
- Glue
- Caterpillar puppet or picture
- Optional: <http://bit.ly/Ab2mQt>

### Lesson One

#### Lesson Two

- [http://www.enchantedlearning.com/coloring/life\\_cycles.shtml](http://www.enchantedlearning.com/coloring/life_cycles.shtml)
- <http://www.frog-life-cycle.com/>
- <http://www.coloring.ws/frog1.htm>
- <http://www.dltk-teach.com/rhymes/frogs/color.htm>
- Worksheets 2a, 2b, 2c
- Toy, puppet, or model frog
- Individual baggies for each student with cut out pictures of the of the frog
- Crayons or markers, scissors

#### Lesson Three

- Important: Tell students to bring in some of their personal pictures, i.e., baby pictures or family members' pictures; use them for the website to draw what they expect to look like as an adult.
- [http://www.kellykindergarten.com/science/science\\_center\\_activities.htm](http://www.kellykindergarten.com/science/science_center_activities.htm)
- Worksheets 3a, 3b, 3c

- Large calendar in target language
- Crayons or markers

#### Lesson Four

- 3 work stations (one for each animal)
- Cut-out pictures of stages of life
- Large paper
- Coloring materials
- Glue

#### Lesson Five

- Teacher-created VoiceThread: <http://www.voicethread.com>  
(Teacher needs to register prior to the class and become familiar with the function of the site.)
- Pictures of people, frogs, and butterflies in various stages of life
- Butterfly pictures from Lesson 1 (for reviewing colors)
- Stages of life poem
- Crayons or markers

### STEM Background Information for Teachers:

Animals and plants go through different stages during their lives. Animals are born, grow, develop into adults, and reproduce. The stages of growth and development are known as a life cycle. Different animals have different life cycles.

#### Butterfly Life Cycle

Many insects change form at each stage of their life cycle. The changes in form are called metamorphosis. During metamorphosis, a butterfly goes through four stages.

First Stage – Egg: a female butterfly will lay hundreds of eggs. These eggs become larvae.

Second Stage – Caterpillar: The larvae look like small worm-like caterpillars which hatch from the eggs. The caterpillars eat leaves and grow larger.

Third Stage – Chrysalis: Then the caterpillar forms a hard case around its self. This is called the cocoon or Chrysalis stage. While in its case, the caterpillar changes shape and forms new body parts.

## Change Can Be Good

长大都会变

Fourth Stage – Butterfly: Eventually, a butterfly breaks out of the case.

### Frog Life Cycle:

Frogs are amphibians. Like many insects, frogs go through metamorphosis during their life cycle. But, frogs don't change their form as quickly as butterflies do. They change very gradually as they develop and grow.

First Stage – Egg: The female frog lays hundreds of eggs which are protected by a jelly-like substance.

Second Stage – Tadpole: Tiny tadpoles hatch from each egg. The tadpole has a tail to help it swim. It also has gills so it can use the oxygen in the water to survive.

Third Stage – Froglet: The tadpoles slowly grow hind legs. Lungs begin to develop inside the body. Then, the tadpole grows front legs. The tail starts to disappear and gills are completely replaced by lungs. Because the tadpole no longer has gills, it must go to the surface of the water to breathe air.

Fourth Stage – Frog: Eventually, the young frog will have four legs and no tail. It will continue to grow until it is a full-sized adult.

### Human Life Cycle

Humans are constantly changing. The stages of the human life cycle are as follows:

First stage – Embryonic Stage: A human's life cycle begins with an embryo in the womb of a female. A full-term pregnancy is 38 weeks.

Second stage – Infant Stage: When a fetus is born, it is called an infant. Human infants are completely helpless at birth. They depend on other humans to provide shelter, protection and food.

Third stage – Childhood Stage: A period of rapid growth occurs from ages 1 to 10. Human children learn how to communicate in language, solve problems, and perform complex tasks.

Fourth stage – Adolescence: Most humans enter adolescence between the ages of 11 and 13. This is a time of rapid bodily changes as humans prepare for reproduction.

Fifth stage – Adulthood: This is the longest stage of the human life cycle.

Optional:

青蛙與人相同的地方- 有兩個眼睛、一個嘴巴；在陸地生活；皮膚乾燥。

青蛙與人不同的地方- 青蛙有四隻腳；能在水中、陸地生活；

生長過程中有卵、蝌蚪、青蛙等不同型態的改變；皮膚潮濕。

# Change Can Be Good

長大都會變

## Lesson 1 - The Life Cycle of a Butterfly

蝴蝶的生命周期

Lesson 1 of 5		Duration: 30 Minutes
<i>Objectives</i>	<p><b>I Can:</b></p> <p>Oral Language:</p> <ul style="list-style-type: none"> <li>Identify the stages in the life of a butterfly.</li> </ul> <p>Literacy:</p> <ul style="list-style-type: none"> <li>Recognize words related to the stages in the life of a butterfly.</li> </ul> <p>STEM and other subject areas.</p> <ul style="list-style-type: none"> <li>Identify the stages in the life of a butterfly.</li> </ul>	
<i>Performance Assessment</i>	Students will communicate their understanding of the stages of the life cycle of the butterfly orally and through demonstration with visual aids or performances.	
<i>Vocabulary and Expressions</i>	<p><b>Recycled</b></p> <p>從一到二十 星期一到星期天 顏色 大小 哪個。 。 。 。 ? 很饿的 長 爬 走 吃 飛 舒服 嘴 眼睛 腿</p>	<p><b>New</b></p> <p>毛毛蟲 蝴蝶 卵 蛹chrysalis 繭cocoon 周期 變 變成</p>
<i>Materials / Resources</i>	<ul style="list-style-type: none"> <li>Work Sheet 1a - Names of states of life cycle of butterfly</li> <li>Work Sheet 1b - The life cycle of a butterfly and word bank</li> <li>Work Sheet 1c - Butterfly (Coloring)</li> <li>Large paper</li> <li>Coloring materials</li> <li>Glue</li> <li>Classroom calendar</li> <li>Caterpillar puppet or picture</li> </ul>	

## Change Can Be Good

長大都會變

	<ul style="list-style-type: none"> <li>○ Book: the Very Hungry Caterpillar, by Eric Carle</li> <li>○ Optional :  <a href="http://www.classroomjr.com/the-very-hungry-caterpillar-activities-and-lesson-plan/hungry-caterpillar-questions/">http://www.classroomjr.com/the-very-hungry-caterpillar-activities-and-lesson-plan/hungry-caterpillar-questions/</a> </li> </ul>
--	--

Key Elements	Lesson 1 Procedures
<p><i>Engagement</i></p> <ul style="list-style-type: none"> <li>● Object, event or question used to engage students.</li> <li>● Connections facilitated between what students know and can do</li> </ul>	<p><b>Days of the Week</b> 星期一到星期天</p> <p>Before class, the teacher “hides” a caterpillar puppet (preferably) or a picture of a caterpillar someplace in the classroom that will be fairly obvious for the students to see, so they can help the teacher find it when she/he begins looking for it.</p> <p>T: (Referring to calendar and pointing to the current week) 小朋友，你們知道一星期有幾天？</p> <p>S: 一星期有七天</p> <p>T: 哪七天呢？(Teacher, pointing to each day, guides students to repeat days of the week.)</p> <p>S: 星期一，星期二，星期三。。。。</p> <p>T: 今天是星期幾呢？</p> <p>S: (Answer with name of day.)</p> <p>T: 現在我要給你們看一樣東西。我有一隻毛毛蟲 (Looking in pockets, on the desk, in a bag—whatever is available.) 噢！我的毛毛蟲呢，我知道我有一隻毛毛蟲。糟糕！我的毛毛蟲在哪兒呢？</p> <p>T: (Holding up hands in defeat, to students) 大家可不可以幫忙找我的毛毛蟲？它這麼大。(Showing with fingers), 它身上有紅色也有綠色。(Or whatever colors the puppet/picture is). 大家看一看你的四周，有沒有一隻毛毛蟲？</p> <p>T: (If no child immediately sees the caterpillar, ask for a volunteer to look for it. While the child is looking, lead the class in chanting.) 毛毛蟲呢？我的毛毛蟲呢？噢！毛毛蟲在這兒—小朋友們，我們來聽一個毛毛蟲的故事。</p>
<p><i>Exploration</i></p> <ul style="list-style-type: none"> <li>● Objects and phenomena are explored.</li> <li>● Hands-on activities, with guidance.</li> </ul>	<p><b>The Very Hungry Caterpillar</b> 很饿的毛毛虫</p> <p>T: (Using the caterpillar book as a visual, introduce the story. Pointing at the caterpillar) 你们看，这是什么？是不是毛毛虫？(Gesturing students to say yes. Ask students to repeat 毛毛虫.) 這本書是說一個_____的故事。(Leaving room for students to respond. If they don't respond, ask the question.) 你们告诉老师，这是谁的故事？</p> <p>S: 毛毛蟲。</p> <p>T: 對了，是一個毛毛蟲的故事。一個毛毛蟲長大的故事。</p> <p>T: (Paging through the book) 你们看，毛毛蟲小时候，不是毛毛蟲，它是一個卵。(Showing students the picture of an egg and caterpillar) 卵像不像</p>

## Change Can Be Good

长大都会变

Key Elements	Lesson 1 Procedures
	<p>毛毛蟲？ S：不像。 T: (Turning the page) 現在，它像毛毛蟲了嗎？它好餓好餓喲。 (Read the story through the 5 consecutive days, Monday through Friday, asking students to identify colors of the fruit, count the numbers of each fruit, and asking how many like to eat each type of fruit. After each page, invite students to repeat with you) 它吃了這麼多的東西，它還是很餓。 T: (Reading what he eats on Saturday, encourage students to answer simple yes/no questions followed by or and wh- questions.) 你猜，毛毛蟲舒服不舒服？ S: 它不舒服。 T: 為什麼它不舒服？它吃了太多了嗎？他吃什麼？（Provide students with the appropriate vocabulary of the items that the caterpillar eats.）S: 它吃。。。。 T: (Gesturing) 我想它可能肚子痛！ T: (Reading what he eats on Sunday) Why does he feels better? Do the leaves make him feel better? 誰知道它為什麼不痛了？是因為它吃葉子嗎？S: 是。 T: 毛毛蟲吃葉子，誰喜歡吃葉子？(No/Yes, teacher responds according students' answers.) T: (Finish reading the book, emphasizing the chrysalis and the butterfly.) (Then use the cut out pictures from Worksheet 1a to illustrate.) 毛毛蟲長大了，它做了一個繭把自己包起來，這個時候它不叫毛毛蟲，它叫蛹。蛹在繭裏面睡兩個星期。我們來數一數兩個星期。 (Using calendar) 星期一，星期二。。。 (And so on) 兩個星期了，毛毛蟲怎麼了？哦！它想出來。。。它出來了。。。可是。。。它不再是毛毛蟲了，它變成蝴蝶了。</p> <p>Note: Distribute the cut out pictures of Worksheet 1a to each student. One set per student. Repeat the story and the motion, ask students to hold up and repeat the key term for each stage of the lifecycle of a butterfly. As students become more comfortable with these words, ask students to volunteer to provide the terms.</p>
<p><i>Explanation</i></p> <ul style="list-style-type: none"> <li>Students explain their understanding of concepts and processes.</li> <li>New concepts and skills are introduced as</li> </ul>	<p><b>From Caterpillar to Butterfly</b> 从蛹变成蝴蝶</p> <p>T: (Referring to the page with the egg on the leaf.) 這是毛毛蟲嗎？這是什麼？(Pause) 這是卵。 S: (Students repeat) 這是卵。 T: 這兒有一個卵。我們來看它怎么变成蝴蝶。 T: (Using pictures from <b>Work Sheet 1a</b> and gestures, conduct guided question and answer to facilitate students to understand and repeat the lifecycle of a butterfly.) For example: 你看到什麼？ 卵怎麼了？</p>

## Change Can Be Good

长大都会变

Key Elements	Lesson 1 Procedures
<p>conceptual clarity and cohesion are sought.</p>	<p>卵能飛嗎？ 卵能爬嗎？然後呢？ 卵变成什么？卵变成毛毛虫吗？还是变成蝴蝶？ 你看到毛毛蟲嗎？ 毛毛蟲能飛嗎？ 毛毛蟲能爬嗎？ 毛毛蟲在做什麼？ 毛毛蟲呢？然後呢？毛毛虫变成什么？ 毛毛虫变成蛹吗？还是变成蝴蝶？ 蛹住在哪里？ 它住在房子里还是住在繭里？ 蛹在繭裏住多久？然後呢？ 蛹變成什麼了？ 蛹变成毛毛虫还是蝴蝶？ 蝴蝶能爬嗎？蝴蝶能飛嗎？ ...</p> <p><b>Use a different motion for each stage:</b> 卵egg, right fist on the back of the open left hand; 毛毛蟲caterpillar, one hand “crawling” up the other arm; 蛹chrysalis, hands beside cheek, as if sleeping; 蝴蝶Butterfly, thumbs linked and hands waving.</p> <p>Optional: Show an actual specimen of a caterpillar and a butterfly in jars. While students observe them, ask questions such as, “Which is the butterfly? Which is the caterpillar?”哪個是蝴蝶？哪個是毛毛蟲？</p> <p>Note: Distribute one set of the cut out word flash cards (Worksheet 1a) to each student. Repeat the Q &amp; A, asking students to how pictures or flash cards, and name each stage. You may turn this into a pair or small group (group of four) activity.</p> <p>T: (Discussing the stages of the life of a butterfly referring to colors and sizes, i.e.這是什麼？它会做什么/跑/飞/跳吗？ Continuing with other stages, ask students to repeat the name of each stage, and to put them in order as a class. Have the class suggest the correct order. Then lead them in a chant, clapping or marching—in place or around the room—with each repetition. If they have learned motions, have them use the motions with each stage.) 蝴蝶有四個周期：卵，毛毛蟲，蛹，蝴蝶。</p> <p>Distribute <b>Worksheet 1c</b> to take home to color. Optional: worksheet based on: <a href="http://www.classroomjr.com/the-very-hungry-caterpillar-activities-and-">http://www.classroomjr.com/the-very-hungry-caterpillar-activities-and-</a></p>



## Change Can Be Good

长大都会变

Key Elements	Lesson 1 Procedures
	<a href="#">lesson-plan/hungry-caterpillar-questions/</a>
<p><i>Elaboration</i></p> <ul style="list-style-type: none"> <li>Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.</li> </ul>	<p><b>What did he eat on Saturday?</b> 它星期六吃什么？</p> <p>T: (Pointing to life cycle cards) 它是毛毛蟲的時候吃.....還是蝴蝶的時候？ (Include # and items from book)?</p> <p>S: 毛毛蟲。</p> <p>T: (Using cards to demonstrate) 它是毛毛蟲的時候，他好餓好餓嗎？？ (pause and indicate the whole class should shout out)</p> <p>S: 毛毛蟲的時候。</p> <p>T: 它是蛹的時候，好餓好餓嗎？還是它喜欢在茧里面睡觉？</p> <p>S: 蛹。</p> <p>T: 是的，蛹的時候它天天睡覺。 Using the tune of 蝴蝶蝴蝶生得真美丽 to teach the butterfly life cycle song 蝴蝶生命周期歌. Add gestures as students sing:</p> <p style="padding-left: 40px;">蝴蝶蝴蝶，生得真美丽， 生命周期有四个， 卵变毛毛虫，蛹变蝴蝶， 它会飞来又飞去。</p>
<p><i>Evaluation</i></p> <ul style="list-style-type: none"> <li>Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.</li> </ul>	<p><b>What stage is it?</b></p> <p>T: (Distributing <b>Work Sheet 1b</b>,) 小朋友， 蝴蝶有哪四個周期？我們來排排看。哪一個先，然後呢？。。。</p> <ul style="list-style-type: none"> <li>Directed by the teacher, the students will match words from the word bank with pictures of the correct stage.</li> <li>Teacher leads the class in the chant one more time.</li> </ul> <p>Lead students to sing the butterfly life cycle song 蝴蝶生命周期歌.</p>

## Change Can Be Good

长大都会变

Teacher Reflection on Lesson 1 - <i>The Life Cycle of a Butterfly</i>	
What worked well?	
What did not work well?	
What would I do differently?	
Other comments or notes	

## Change Can Be Good

長大都會變

### Lesson 2 - the Life Cycle of a Frog

青蛙的生命周期

Lesson 2 of 5		Duration: 30 Minutes
<i>Objectives</i>	<p><b>I Can:</b></p> <p>Oral Language:</p> <ul style="list-style-type: none"> <li>Identify the stages in the life cycle of a frog.</li> </ul> <p>Literacy:</p> <ul style="list-style-type: none"> <li>Recognize words related to the stages in the life cycle of a frog.</li> </ul> <p>STEM and other subject areas.</p> <ul style="list-style-type: none"> <li>Identify the stages in the life cycle of a frog.</li> </ul>	
<i>Performance Assessment</i>	Students will communicate orally or through physical manipulation the stages of the life cycle of the frog.	
<i>Vocabulary and Expressions</i>	<p>第一 最後 蝌蚪 幼蛙 青蛙 尾巴 長 短 游泳 跳 走</p> <p>句型： 這是什麼？ 會不會？ 好不好？ 對不對？</p>	
<i>Materials/Resources</i>	<ul style="list-style-type: none"> <li>Worksheet 1a – Life Cycle of a Butterfly</li> <li>Worksheet 2a – 5 Green and Speckled Frogs (Poem)</li> <li>Worksheet 2b – Frog and Log</li> <li>Worksheet 2c – The Life Cycle of a Frog</li> <li>Toy, puppet, or model frog</li> <li>Individual baggies for each student with cut-out pictures of the of the frog</li> <li>Crayons or markers, scissors</li> <li><a href="http://www.enchantedlearning.com/coloring/life_cycles.shtml">http://www.enchantedlearning.com/coloring/life_cycles.shtml</a></li> <li><a href="http://www.frog-life-cycle.com/">http://www.frog-life-cycle.com/</a></li> <li><a href="http://www.coloring.ws/frog1.htm">http://www.coloring.ws/frog1.htm</a></li> <li><a href="http://www.dltk-teach.com/rhymes/frogs/color.htm">http://www.dltk-teach.com/rhymes/frogs/color.htm</a></li> </ul>	

## Change Can Be Good

長大都會變

Key Elements	Lesson 2 Procedures
<p><i>Engagement</i></p> <ul style="list-style-type: none"> <li>Object, event or question used to engage students.</li> <li>Connections facilitated between what students know and can do</li> </ul>	<p><b>Introduce Frog</b> 介紹小青蛙</p> <p>T: (Showing puppet or toy frog to students) 我有一隻小青蛙，它有一張嘴，兩隻眼睛，它有幾條腿？，我們一起來數一數 (If possible). T: 一，二，三，四。它有四條腿。那麼兩隻青蛙呢？兩隻青蛙有幾張嘴？</p> <p>S: 兩張嘴。</p> <p>T: 兩隻青蛙呢？幾張嘴？幾個眼睛？又有幾條腿呢？我們一起來來數數看。</p> <p>T: (Using the song Five Green Frogs, <b>Worksheet 1a</b>, asks students to repeat each line after the teacher, using visuals to establish meaning.) 一隻青蛙，一張嘴。。。 (Counting with class, pointing to the frogs' body parts)...and so on.</p>
<p><i>Exploration</i></p> <ul style="list-style-type: none"> <li>Objects and phenomena are explored.</li> <li>Hands-on activities, with guidance.</li> </ul>	<p><b>Frogs have a life cycle too</b> 青蛙也有生命週期</p> <p>T: (Showing egg picture for butterfly life cycle -<b>Worksheet 1a</b>) 你們記得蝴蝶嗎？請你們說說看蝴蝶是怎麼長大的，從什麼變成什麼。你們誰知道，這是什麼？</p> <p>S: 卵</p> <p>T: 卵變成什麼？</p> <p>S: 毛毛蟲</p> <p>T: 對，卵變成毛毛蟲。(Finish the four stages of a butterfly's lifecycle. Put the pictures on the wall or board. Showing egg picture from frog life cycle) 這兒也有一個卵。這個卵和毛毛蟲的卵看起來一樣嗎。它也會變成毛毛蟲嗎？</p> <p>S: 不一樣</p> <p>T: 這個卵是青蛙的。你猜青蛙的卵會變成什麼？</p> <p>S: 青蛙。</p> <p>T: 對了，我們來看看青蛙怎麼變！(Showing the cut out pictures from Worksheet 2a.) 這是一個青蛙卵，它會變成蝌蚪。你們會不會說，蝌蚪。這兒有一隻蝌蚪。(Showing picture <b>Worksheet 2d</b>) 蝌蚪住在水裏。蝌蚪沒有腿，它有一條尾巴。蝌蚪會走路嗎？它住在水裏，它會游泳嗎？(Make a swimming motion with two palms together.) 游泳，蝌蚪游泳。</p> <p>S: 游泳，蝌蚪游泳。(gesturing students to swim.)</p> <p>T: (showing picture) 小蝌蚪長大了，叫幼蛙，它先長出後腿，再長前腿，這個時候它會游泳，也會跳了。</p> <p>T: 它的尾巴也慢慢的不見了，最後它就變成了青蛙了！</p> <p>T: 我們再來看一下青蛙，青蛙是怎麼變的。</p> <p>T: 小朋友，青蛙是不是從卵就變成大青蛙？(<b>Worksheet 2c</b>, guiding students to the pictures of egg, tadpole, and frog.) 青蛙的生命週期是從卵到蝌蚪，幼蛙，變成青蛙。</p> <p>T: (Showing pictures from Worksheet 2a to facilitate students to learn and practice) 小朋友，誰可以告訴同學們青蛙是怎麼長大的？</p>

## Change Can Be Good

长大都会变

Key Elements	Lesson 2 Procedures
	S: (Answer accordingly)
<p><i>Explanation</i></p> <ul style="list-style-type: none"> <li>• Students explain their understanding of concepts and processes.</li> <li>• New concepts and skills are introduced as conceptual clarity and cohesion are sought.</li> </ul>	<p><b>Naming the stages of the life of a frog</b> 我会说青蛙的生命周期</p> <p>T: (Showing <b>Worksheet 2a</b>, use both pictures and word flash cards, facilitate students to name stages of frog’s life cycle) 青蛙有四個成長階段，卵，蝌蚪，幼蛙，青蛙。你們知道哪一個是卵，蝌蚪，幼蛙，青蛙？</p> <p>S: (Students repeat and answer questions)</p> <p>T: (Using the cut-apart stages of the life cycle of a frog: 4 large pictures of the stages of the frog and smaller cut-apart pictures in envelopes or zippered plastic bags <b>Worksheet 2c</b>) Note: Divide students into pair or groups of four to play and sequence the life cycle of a frog.</p> <p>T: 哪一個是卵/蝌蚪/幼蛙/青蛙？ (Asks students to repeat the name of each stage.)</p> <p>S: (Hold up appropriate picture and name stage.)</p>
<p><i>Elaboration</i></p> <ul style="list-style-type: none"> <li>• Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.</li> </ul>	<p><b>Which comes first?</b> 哪一个先？</p> <p>T: 現在老師要你們自己把青蛙怎麼長大的排出來。</p> <p>S: (With assistance, students put the stages in order.)</p> <p>T: (Referring to pictures, gesturing and asking comprehension questions) 哪一個先？</p> <p>S: (Students respond to guided questions about first stage, last stage, color, size and movement.)</p> <p>Using the same tune as the butterfly song, teach students to sing the frog life cycle song 青蛙生命周期歌, with motions:          青蛙青蛙，扑通扑通跳，          生命周期有四个，卵变蝌蚪，幼蛙变青蛙，它会游泳又会跳。</p>
<p><i>Evaluation</i></p> <ul style="list-style-type: none"> <li>• Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.</li> </ul>	<p><b>Assessment – Let’s Make a Frog Book</b></p> <p>T: 我們來看看你們記得不記得我們今天學什麼？誰記得青蛙的生命周期？。(Reviews order of life cycle.)</p> <p>Using cut up stages of the life cycle of the frog copied onto 8.5 x 11” paper, students will make a booklet identifying the stages of the life cycle of the frog. They will color and place the corresponding picture and word in order to form the book. 青蛙從卵到蝌蚪到幼蛙，最後到青蛙。</p> <p>Lead students to sing the frog life cycle song 青蛙生命周期歌, with motions。</p>

## Change Can Be Good

长大都会变

Teacher Reflection on Lesson 2 - <i>The Life Cycle of a Frog</i>	
What worked well?	
What did not work well?	
What would I do differently?	
Other comments or notes	

## Change Can Be Good

长大都会变

### Lesson 3 - The Life Cycle of a Person

人的生命周期

Lesson 3 of 5		Duration: 30 Minutes
<i>Objectives</i>	<b>I Can:</b> Oral Language: <ul style="list-style-type: none"><li>• Identify the stages in the life cycle of a human.</li></ul> Literacy: <ul style="list-style-type: none"><li>• Recognize words related to the stages in the life cycle of a human.</li></ul> STEM and other subject areas. <ul style="list-style-type: none"><li>• Identify the stages in the life cycle of a human.</li></ul>	
<i>Performance Assessment</i>	Students will communicate orally or through physical manipulation the stages of the life cycle of a human.	
<i>Vocabulary and Expressions</i>	人 小娃娃 小孩 青少年 大人 第一 第二 第三 第四	
<i>Materials/Resources</i>	<ul style="list-style-type: none"><li>○ Large calendar in target language</li><li>○ Crayons or markers</li><li>○ <b>Worksheets 3a</b></li><li>○ <b>Worksheet 3b</b></li><li>○ <a href="http://www.kellyskindergarten.com/science/science_center_activities.htm">http://www.kellyskindergarten.com/science/science_center_activities.htm</a></li><li>○ <a href="http://tuxpaint.org/">http://tuxpaint.org/</a> (Use for the website to draw what they expect to look like as an adult.)</li></ul>	

## Change Can Be Good

长大都会变

Key Elements	Lesson 3 Procedures
<p><i>Engagement</i></p> <ul style="list-style-type: none"> <li>● Object, event or question used to engage students.</li> <li>● Connections facilitated between what students know and can do</li> </ul>	<p><b>Who are you? 你是谁?</b></p> <p>Put cut-up pictures of stages of butterfly and frog into zipper bags, one bag per group (<b>Worksheet 1a, Worksheet 2a</b>). Divide students into groups (preferably 4 per group). Teacher gives one bag per group. Students sort pictures by stages of the life of the butterfly or the frog. Each student holds one picture of the stage.</p> <p>Teacher leads students in TPR activities, using a different motion for each stage:</p> <p>Butterfly groups:</p> <p style="padding-left: 20px;">卵, right fist on the back of the open left hand;          毛毛蟲, one hand "crawling" up the other arm;          蛹, hands beside cheek, as if sleeping;          蝴蝶 thumbs linked and hands waving.</p> <p>Lead the whole class or invite students to sing the butterfly song. Frog groups:</p> <p style="padding-left: 20px;">卵, right fist on the back of the open left hand;          蝌蚪, closed elbows and use both hands making swimming motions          幼蛙, still closed elbows, kneeling down and making hopping motion          青蛙, stand up and hop.</p> <p>Lead the whole class or invite students to sing the butterfly song.          T: 青蛙和蝴蝶生命周期有几个? (Teacher prompting) S: 四個、          T: 它們的四個周期都不一樣, 我們來看看有什麼不一樣。(Teacher invites one group, either frog or butterfly group, to come to front with their pictures.          S: (With teacher prompting, students lineup in order of the life cycle.)          T: 告訴我們你是什麼? (Modeling the sentence)          我是卵, 我是第一          我是毛毛蟲, 我是第二。。。。 Each student who holds the target picture responds appropriately.</p>
<p><i>Exploration</i></p> <ul style="list-style-type: none"> <li>● Objects and phenomena are explored.</li> <li>● Hands-on activities, with guidance.</li> </ul>	<p><b>People have a life cycle, too! 人也有生命周期!</b></p> <p>T: (Asking a student to stand next to him/her) 我是人, 你也是人, 他也是人, 我們有什麼不一樣? 我和_____ (student name) 有什麼不一樣? (teacher exaggerate the size different)          S: 你大, 他小          T: 我比較大, 他比較小。我是大人, 他是小孩, 你也是小孩 (Facilitate students to point at each other or pictures of adults or children and name accordingly. T: (show pictures of babies) 这是小娃娃。小娃娃大, 還是你</p>



## Change Can Be Good

长大都会变

Key Elements	Lesson 3 Procedures
	<p>大？            S: 我大。            T: 对，可是我们每个人小时候都是小娃娃，因为我们人也有生命周期。我们来看看人的生命周期有几个，人怎么变。            T: 人会不会变成毛毛虫/蛹？，人会不会变成蝌蚪/幼蛙？。            T: (Showing large pictures of the stages of a human from <b>Worksheet 3a &amp; 3b</b>) 那么人怎么变？第一个周期是小娃娃吗？(second, third, etc)            S: 是，是小娃娃            T: 很好。(Pointing to baby). 第一个周期是小娃娃。你是娃娃嗎？ S: 不是。            T: 你長大了，你不是小娃娃了，你是小孩了！</p> <p>Call on students to ask them if they are baby or children. Suggested teacher prompts: 你大還是娃娃大？你是用走路還是用爬的？你可以站嗎？小娃娃會不會走路？            T: (show pictures of teenagers) 小孩一直長就变成青少年了。你是青少年吗？            S: 不是，我不是青少年。我是小孩。            T: (Show pictures of adults) 青少年长大以後，就是大人了。他们是大人吗？            S: 大人。 Show pictures of people in different stages and ask students to identify.            T: 这是大人吗？你是大人嗎？            S: (Name people in their lives, perhaps parents, teachers. If needed, Teacher can prompt with: _____ (name of principal) 是大人嗎？            T: (Divide the class into groups. Give each group a set of cards to arrange in order and ask questions about size: bigger, smaller, old, young.)</p>
<p><i>Explanation</i></p> <ul style="list-style-type: none"> <li>• Students explain their understanding of concepts and processes.</li> <li>• New concepts and skills are introduced as conceptual clarity and cohesion are sought.</li> </ul>	<p><b>Identify the stages of Life</b> 人的生命周期</p> <p>Divide the class into pairs or groups of four, using the cut out word flash cards and pictures from <b>Worksheets 3a</b> and <b>Worksheet 3b</b>, play a matching game and create a poster of human’s life cycle. . Students present their posters and explain to the class the life cycle of human.</p> <p>Using the same tune of the butterfly song, teach students the people’s life cycle song 人的生命周期歌:            小孩小孩，又跑又会跳，            人的生命周期有四个，            娃娃变小孩，青少年大人            人人长大都会变。</p>

## Change Can Be Good

长大都会变

Key Elements	Lesson 3 Procedures
<p><i>Elaboration</i></p> <ul style="list-style-type: none"> <li>Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.</li> </ul>	<p><b>Matching pictures to stages</b>            Show pictures of people in various stages of life and ask students to identify the stage. (<b>Worksheet 3c</b>)</p> <p>T: (Give each student a picture of a person in various stages of life. On the board will be the words baby, child, teen, adult. Each student will match his/her picture with the word on the board and say a simple sentence relating to the picture.)            T: 哪一張照片是第一張?            Ss: (Holding up baby pictures).            T: 誰最先?            S: 小娃娃。            T: 對了。</p> <p>Teacher leads students to chant:            人的生命周期歌:            小孩小孩，又跑又会跳，            人的生命周期有四个，            娃娃变小孩，青少年大人            人人长大都会变。</p>
<p><i>Evaluation</i></p> <ul style="list-style-type: none"> <li>Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.</li> </ul>	<p><b>I am a big person now</b>            Have students draw a picture of what they think they will look like as an adult. Download the program <a href="http://tuxpaint.org/">http://tuxpaint.org/</a>, use the Microsoft program "Paint" to create drawings on a computer, or give the students paper and markers.</p> <p>Using pictures of Chinese families create their Chinese friend's family album and label each stage with 小娃娃，小孩，青少年，大人。Students introduce their Chinese friend and his/her family.</p>

## Change Can Be Good

长大都会变

Teacher Reflection on Lesson 3 - <i>The Life Cycle of a Person</i>	
What worked well?	
What did not work well?	
What would I do differently?	
Other comments or notes	

## Change Can Be Good

長大都會變

### Lesson 4 – Same but Different

Lesson 4 of 5		Duration: 30 Minutes
<i>Objectives</i>	Students will be able to identify the differences in the life cycles of the butterfly, the frog and a person.	
<i>Performance Assessment</i>	Students will present their posters about the stages of life of the butterfly, frog, and person.	
<i>Vocabulary and Expressions</i>	哪裡有 一樣 不一樣	
<i>Materials/Resources</i>	<ul style="list-style-type: none"> <li>○ 3 work stations (1/each animal)</li> <li>○ Cut out pictures of stages of life cycles</li> <li>○ Large paper to be used for posters</li> <li>○ Coloring materials</li> <li>○ Glue</li> <li>○ Calendar</li> <li>○ Book: The Very Hungry Caterpillar, Eric Carle</li> </ul>	

Key Elements	Lesson 4 Procedures
<p><i>Engagement</i></p> <ul style="list-style-type: none"> <li>● Object, event or question used to engage students.</li> <li>● Connections facilitated between what students know and can do</li> </ul>	<p><b>Review the ordinal numbers</b></p> <p>T: (Referring to calendar.) 你知道今天是星期幾？</p> <p>S: 今天是。。。</p> <p>T: 很好，一星期的第一天是哪一天？ (If students cannot answer question (first, etc.), then point to the day as a scaffold. Give them the chance to remember on their own first. Continues through days of week, but not asking for them in order.)</p>

## Change Can Be Good

长大都会变

Key Elements	Lesson 4 Procedures
<p><i>Exploration</i></p> <ul style="list-style-type: none"> <li>• Objects and phenomena are explored.</li> <li>• Hands-on activities, with guidance.</li> </ul>	<p><b>Review life cycles</b></p> <p>T: (Referring to the book <i>The Very Hungry Caterpillar</i>, reviews story and metamorphosis to butterfly.) 毛毛蟲吃什麼？它最先吃什麼？它最後吃什麼？它在繭裏多久？它的卵呢？ S: (Answer appropriately)</p> <p>T: (Referring to pictures of the life cycle of the frog, <b>Worksheet 2e</b>, asks questions.) 青蛙也有生命週期。我們來看看青蛙的生命週期階段。 S: (Answer appropriately)</p> <p>T: (Referring to stages of life pictures for human asks questions.) 青蛙共有幾期？這是。。。？這是。。。？ S: (Answer appropriately)</p> <p>T: (to student 1) ask (Student 2) 那一個最先？</p>
<p><i>Explanation</i></p> <ul style="list-style-type: none"> <li>• Students explain their understanding of concepts and processes.</li> <li>• New concepts and skills are introduced as conceptual clarity and cohesion are sought.</li> </ul>	<p><b>Which came first?</b></p> <p>T: (Divides class into three groups, one at each work table. On each table are pictures of the life cycle of the designated animal taken from <b>Worksheets 1a, 2e, and 3a.</b>)</p> <p>T: 你們每桌有一組照片，請按先後順序排一排。如果有問題的話，可以互相討論或是問我。</p>
<p><i>Elaboration</i></p> <ul style="list-style-type: none"> <li>• Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.</li> </ul>	<p><b>Making posters</b></p> <p>Students put pictures of stages of the life cycle of an animal in order and glue them to a piece of poster paper labeled with the designated animal. Students rotate to the next center and repeat the activity with the designated animal.</p> <p>S1 to S2: 哪一個是第一，第二，第三，第四？</p>

## Change Can Be Good

长大都会变

Key Elements	Lesson 4 Procedures
<p><i>Evaluation</i></p> <ul style="list-style-type: none"><li>• Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.</li></ul>	<p><b>Presenting posters</b></p> <p>T: 我們來看看這張圖片 (To student #1) 這是什麼？</p> <p>S: 蝴蝶</p> <p>T: 哪一張先，哪一張後？</p> <p>S: (Answers appropriately) Students present charts to class telling what life cycle they are depicting and naming the stages.</p> <p>T: 蝴蝶，青蛙和人，他們有什麼相同？</p> <p>S: (With teacher guidance) 他們都有生命週期</p> <p>T: 他們有什麼不同？</p> <p>S: (With teacher guidance) 他們的每一期都不太一樣。</p> <p>Students may select to perform the butterfly, frog, or human life cycle song. They may sing and perform individually, in pairs or small group of four.</p>

## Change Can Be Good

长大都会变

Teacher Reflection on Lesson 4 – <i>Same but Different</i>	
What worked well?	
What did not work well?	
What would I do differently?	
Other comments or notes	

## Change Can Be Good

长大都会变

### Lesson 5 - Hear My Voice! - Assessment

Lesson 5 of 5		Duration: 30 Minutes
<i>Objectives</i>	Students will be able to engage in interactive communication with classmates, asking and answering questions about life cycles.	
<i>Performance Assessment</i>	Students will identify and describe the changes that occur in people as they develop in a VoiceThread	
<i>Vocabulary and Expressions</i>	No new vocabulary or expressions	
<i>Materials/Resources</i>	Teacher-created VoiceThread, <a href="http://www.voicethread.com">http://www.voicethread.com</a> (Teacher needs to register prior to the class and become familiar with the function of the site.)  Pictures of people, frogs, and butterflies in various stages of life Butterfly pictures from lesson 1 (for reviewing colors)  Stages of life poem  Crayons or markers	

Key Elements	Lesson 5 Procedures
<i>Engagement</i> <ul style="list-style-type: none"> <li>● Object, event or question used to engage students.</li> <li>● Connections facilitated between what students know and can do</li> </ul>	<p><b>Review ordinal numbers</b></p> <p>T: (Asking students to line up, four at a time. Review who is first, second, etc. in line.) 誰是第一。 。 。 誰是第二。 。 。</p> <p>S: (Answer with students' names.)</p> <p>T: 讓我們看你的海報。 。 。 這是_____ [ Name the Student] 蝴蝶。 你可以告訴我們你的海報, 哪個排第一? 第二? 第三? 第四?</p> <p>S: (Answers)</p> <p>T: (Continue asking questions about other sample posters) 哪個是第一, 第二, 第三, 第四?</p> <p>T: (Ask students to describe using vocabulary for colors, sizes and stages.)</p>



## Change Can Be Good

长大都会变

Key Elements	Lesson 5 Procedures
<p><i>Exploration</i></p> <ul style="list-style-type: none"> <li>• Objects and phenomena are explored.</li> <li>• Hands-on activities, with guidance.</li> </ul>	<p><b>Reinforcement of the content</b></p> <p>T: (Gives each student his/ her poster) 你可以告訴在你旁邊同學，你最喜歡哪個生命週期？</p> <p>S: (Talk together and name stages.)</p> <p>T: (Helping students to explain their posters to each other)</p> <p>我的名字是 _____</p> <p>我的海報是 _____ 的生命周期</p> <p>_____ 的四個生命周期是 _____。</p> <p>我最喜歡的周期是 _____。</p>
<p><i>Explanation</i></p> <ul style="list-style-type: none"> <li>• Students explain their understanding of concepts and processes.</li> <li>• New concepts and skills are introduced as conceptual clarity and cohesion are sought</li> </ul>	<p><b>Let's record our voices.</b></p> <p>T: (Demonstrates how to record and shares a sample VoiceThread for a butterfly or a frog).</p> <p>T: (Helping students to explain their posters to each other)</p> <p>我的名字是 _____</p> <p>我的海報是 _____ 的生命周期</p> <p>_____ 的四個生命周期是 _____。</p> <p>我最喜歡的周期是 _____。</p>
<p><i>Elaboration</i></p> <ul style="list-style-type: none"> <li>• Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.</li> </ul>	<p><b>Recording</b></p> <p>T: (Assists with student recording)</p>

## Change Can Be Good

长大都会变

Key Elements	Lesson 5 Procedures
<p><i>Evaluation</i></p> <ul style="list-style-type: none"> <li>Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.</li> </ul>	<p>Each student will look at the VoiceThread that the teacher has created for the life cycle of a person (one picture for each stage of the life cycle), a frog, or a butterfly and listen to the recorded directions of the teacher. Each student will add his or her oral assessment to the VoiceThread, describing the life cycle using appropriate vocabulary, including the name of the stage, sizes, and descriptive words.</p>
<p><i>Engagement</i></p> <ul style="list-style-type: none"> <li>Object, event or question used to engage students.</li> <li>Connections facilitated between what students know and can do</li> </ul>	<p>T: 小朋友好，大家都學了很多，很好。 我們現在來練習我們在這一課所學的。(Teacher lead students sign along...)</p> <p>T: 首先是蝴蝶</p> <p>T: 蝴蝶有四個周期：</p> <p>S: 卵，毛毛蟲，蛹，蝴蝶。</p> <p>T: 我們來唱蝴蝶生命週期歌 記得加動作喔</p> <p>S: 蝴蝶蝴蝶，生得真美麗，生命週期有四個， 卵變毛毛蟲，蛹變蝴蝶，它會飛來又飛去。</p> <p>T: 再來是青蛙生命週期歌:</p> <p>S: 青蛙青蛙，扑通扑通跳， 生命週期有四個，卵變蝌蚪， 幼蛙變青蛙，它會游泳又會跳。</p> <p>T: 然後是人的生命週期歌:</p> <p>S: 小孩小孩，又跑又會跳， 人的生命週期有四個， 娃娃變小孩，青少年大人 人人長大都會變。</p> <p>T: 最後我們一起來唱數青蛙的歌:</p> <p>S: 一隻青蛙，一張嘴，兩隻眼睛，四條腿， 乒乒乒，跳下水呀。 跳過蓮蓬來，浪子高， 跳入蓮葉下，水中浮。 荷兒梅子兮，水上漂， 花兒梅子兮，水上漂。 兩隻青蛙，兩張嘴，四隻眼睛，八條腿。 。 。 。 。 。</p>

## Change Can Be Good

长大都会变

Teacher Reflection on Lesson 5 - <i>Hear My Voice!</i> - Assessment	
What worked well?	
What did not work well?	
What would I do differently?	
Other comments or notes	