Change Can Be Good
التغيير جيد!

Module Overview

<table>
<thead>
<tr>
<th>Target Language: Arabic</th>
<th>Grade Level: K-1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proficiency Level:</strong> Junior Novice Low</td>
<td></td>
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<tr>
<td><strong>Summary:</strong> Students will observe and tell how frogs, butterflies and human beings grow and change.</td>
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<tr>
<td><strong>Enduring Understanding:</strong> Living things change as they grow and develop.</td>
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<tr>
<td><strong>Essential Questions:</strong> How do living things change? How do I change as I grow?</td>
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</tbody>
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### Standards Targeted

#### 5C – World Language Standards

**Communication**
- Ask and answer simple questions related to life cycles of a frog, a butterfly and a human (1.1)
- Understand and interpret the target language in its spoken and written form on learned topics (1.2)
- 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)

**Connections**
- Name the stages of the life cycle of a frog, a butterfly and a human (3.1; see STEM standards)

**Comparisons**
- Students demonstrate understanding of the nature of language through comparisons of English and target language (4.1)

**Community**
- Perform songs in the target language (5.1)

#### 5E – STEM Standards

**1.SF Structure and Function**
Students who demonstrate understanding can:
- a. Observe and analyze the external structures of animals to explain how these structures help the animals meet their needs.
- 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.
- 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.

#### Math Common Core

Sort objects into categories and compare quantities

**PK. MD 4** Ability to sort objects into categories and then compare the categories.

**PK. G.4** Ability to describe three-dimensional objects using vocabulary such as size, shape, color, corners, edges, and/or...
### Knowledge: Students will know...

**Vocabulary**
- Recognize words related to the stages in the life of a butterfly, a frog, and a human.

**Expressions and patterns:**
- Where and what patterns
- More or less
- Be able to make simple statements
- Be able to ask and answer simple questions

### Skills: Students can...

1. Tell that living creatures go through stages.
2. Name the stages in the life cycle of a butterfly, a frog, and a human.

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

- **Lesson 1 - The Life Cycle of a Butterfly**
- **Lesson 2 - The Life Cycle of a Frog**
- **Lesson 3 - The Life Cycle of a Human**
- **Lesson 4 - Same but Different**
- **Lesson 5 - Hear My Voice! – Assessment (Identify the life cycles of these species)**

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**Performance Assessment:**

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.

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**Materials/Resources:**
- [http://www.teachingheart.net/veryhungrycaterpillar.html](http://www.teachingheart.net/veryhungrycaterpillar.html)
- [http://ethemes.missouri.edu/themes/407](http://ethemes.missouri.edu/themes/407)
- [http://www.valdosta.edu/~vlstout/topic.html](http://www.valdosta.edu/~vlstout/topic.html)
- [http://wikieducator.org/Crawling_to_Flying:_The_Life_Cycle_of_a_Butterfly](http://wikieducator.org/Crawling_to_Flying:_The_Life_Cycle_of_a_Butterfly)
- [http://www.kellyskindergarten.com/science/science_center_activities.htm](http://www.kellyskindergarten.com/science/science_center_activities.htm)
Lesson One
- Worksheets 1a, 1b, 1c
- Large paper

Lesson Two
- [http://www.coloring.ws/frog1.htm](http://www.coloring.ws/frog1.htm)
- Worksheets 2a, 2b, 2c
- Toy, puppet, or model frog
- Individual baggies for each student with cut out pictures 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.kellyskindergarten.com/science/science_center_activities.htm](http://www.kellyskindergarten.com/science/science_center_activities.htm)
  - Worksheets 3a, 3b, 3c

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](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.

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.
Lesson 1 - The Life Cycle of a Butterfly

<table>
<thead>
<tr>
<th>Objectives</th>
</tr>
</thead>
</table>
| **I Can:**  
**Oral language:**  
- Identify the stages in the life of a butterfly.  
**Literacy:**  
- Recognize words related to the stages in the life of a butterfly.  
**STEM and other subject areas:**  
- Identify the stages in the life of a butterfly. |

<table>
<thead>
<tr>
<th>Performance Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will communicate their understanding of the stages of the life cycle of the butterfly orally and through demonstration with visual aids or performances.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vocabulary and Expressions</th>
</tr>
</thead>
</table>
| **Recycled:**  
الأرقام من واحد إلى عشرة  
أيام الأسبوع  
أسماء الألوان  
كبير / أكبر  
صغير / أصغر  
 أيّ؟ |
| **New:**  
الدودة/اليرقة  
فراشة  
بيضة  
الخادرة / الكريساليس  
مراحل  
تغيير  
يزحف  
يعطي  
يشملي  
يأكل  
يطير |

<table>
<thead>
<tr>
<th>Materials / Resources</th>
</tr>
</thead>
</table>
| - Work Sheet 1a - Names of states of life cycle of butterfly  
- Work Sheet 1b - The life cycle of a butterfly and word bank  
- Work Sheet 1c - Butterfly (Coloring)  
- Large paper  
- Coloring materials  
- Glue  
- Classroom calendar  
- Caterpillar puppet or picture  
- Book: the Very Hungry Caterpillar, by Eric Carle  
http://www.amazon.com/dp/1852691247/?tag=njbarangyourlo-20&camp=14573&creative=327641&linkCode=as1&creativeASIN=1852691247&adid=O2ZP9YHRFHAKCC4RFXN6&  
- Optional:  
http://www.classroomjr.com/the-very-hungry-caterpillar-activities-and-activities> |
### Key Elements

<table>
<thead>
<tr>
<th><strong>Engagement</strong></th>
<th><strong>Lesson 1 Procedures</strong></th>
</tr>
</thead>
</table>
| **Object, event or question used to engage students.** | **Days of the Week**
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.

**T:** (Referring to calendar and pointing to the current week)
كم يوماً في الأسبوع؟

**S:** سابعة أيام في الأسبوع

**T:** ما هي أيام الأسبوع؟

(teacher, pointing to each day, guides students to repeat days of the week.)

**S:** الاثنين، الثلاثاء...

**T:** ما هو اليوم؟

**S:** (Answer with name of day.)

الآن أريد أن أريكم شيئاً. معي كتاب عن دودة الكاتربيلار، وأريد أن أريكم شيئاً ما.

(looking in pockets, on the desk, in a bag—whatever is available.)

أين الدودة؟ أكيد كان في دودة معي.

يا الله!

أين دودتي؟

**T:** (holding up hands in defeat, to students)

帮من تجد دودة؟ هل تجدون الدودة؟

أين الدودة؟ أحد الدودة من فضلكم. هي في هذا الحجم.

(Showing with fingers),

(whatever colors the puppet/picture is).

وادي البحث، هل تجدون الدودة؟

**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.)

أين الدودة؟ أين الدودة؟ ممتاز!

وجدنا / وجدت الدودة / وجدت دودة صديقتنا.

إلا الآن، نقرأ قصة الدودة.

| **Exploration** | **The Very Hungry Caterpillar**
|----------------|-----------------------------|
| **Objects and phenomena are explored.** | **T:** (Using the caterpillar book as a visual, introduce the story.)

هذا كتاب عن...

(Leaving room for students to respond. If they don’t respond, ask the question.)

عن ماذا هذا الكتاب؟

**S:** صحيح.

القصة على الدودة الجائعة جداً. وهي تبحث عن شيء طيب للأكل.

**T:** (Paging through the book)

هي هنا. ببستة صغيرة على الورقة. هي لا تشبه الدودة. صحيح؟

**T:** (Turning the page)

(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)

لهو، هل تشبه الدودة.

(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)

**T:** (Reading what he eats on Saturday, encourage students to answer simple yes/no questions followed by or and wh- questions.)

هل الدودة مبسوطة؟
### Key Elements | Lesson 1 Procedures
--- | ---
S: هي مبسوطة. | T: (Gesturing) أفكر عندنا ألم في المعدة (No/Yes, teacher responds according students’ answers.)
T: (Reading what he eats on Sunday) كيف تشعر الدودة؟ هل الأوراق ستجعلها تشعر أحسن؟ | T: (Finish reading the book, emphasizing the chrysalis and the butterfly.)
نعم! | الدودة تصنع بيئا صغيرة وتنام داخله لمدة أسبوعين. البيت اسمه (using calendar)
Aفكار أن الديدان يحبون أكل الأوراق. هل تتحون أن تأكلوا أوراق؟ | الأحد، الاثنين... (and so on)
S: نعم! | الآن شيء جديد يحصل... الدودة تزحف إلى الخارج. لكن انتظر! أنها فراشة!!! هذا تغيير كبير، صحيح؟؟
T: (Discussing the stages of the life of a butterfly referring to colors and sizes) ما هذه؟ بيضة أم خادرة؟ | (Pause)
S: (Students repeat) هذه بيضة. | T: (Using pictures from Worksheet 1a, teacher gesturing to demonstrate each motion.)
T: (Referring to the page with the egg on the leaf. هل هذه دودة؟ ما هذه ؟ (Pause) هذه بيضة. | هذه بيضة.
S: (Students repeat) هنا هي بيضة. بلا نرى ماذا سيحدث لها | T: (Continuing with other stages, ask students to repeat the name of each
T: (Discussing the stages of the life of a butterfly referring to colors and sizes) ما هذه؟ بيضة أم خادرة؟ | هل ترون البيضة؟ هل ترون البيضة؟ ماذا ترون أيضا؟ هذه الخادرة(الكريسيس) وهذه الفراشة. هل الدودة تزحف أم تطير؟ هل تطير البيضة؟ هل يطير الكريسيس؟ هل تطير الفراشة؟
Use a different motion for each stage:
Egg: right fist on the back of the open left hand;
Caterpillar: one hand “crawling” up the other arm;
Chrysalis: hands beside cheek, as if sleeping;
Butterfly: thumbs linked and hands waving.
Optional: Show an actual specimen of a caterpillar and a butterfly in jars. While students observe them, ask questions such as، أين الفراشة وأين الدودة؟
T: (Discussing the stages of the life of a butterfly referring to colors and sizes) ما هذه؟ بيضة أم خادرة؟ | T: (Continuing with other stages, ask students to repeat the name of each
<table>
<thead>
<tr>
<th>Key Elements</th>
<th>Lesson 1 Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.)</td>
<td>Distribute Worksheet 1c to take home to color. Optional: worksheet based on: <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></td>
</tr>
<tr>
<td>الفراشة لها أربع مراحل بيضة، دودة، خادرة، وفراشة.</td>
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</tbody>
</table>

**Elaboration**

- Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.

**What did he eat on Saturday?**

T: (Pointing to life cycle cards) هل كانت صديقتنا فراشة أم دودة عندما أكل الع.... (Include number and items from book)?

S: كانت دودة.

T: صحيح (Using cards to demonstrate) ما كانت بيضة. ما كانت كريساليس. ما كانت فراشة. هي كانت دودة)

ماذا كانت عندما أكلت...؟

S: دودة. هي كانت دودة.

T: صحيح. هي كانت دودة.

**Evaluation**

- Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.

**What stage is it?**

T: (Distributing Worksheet 1b) لنرى إذا تستطيعون تسمية كل مراحل الفراشة. (Directed by the teacher, the students will match words from the word bank with pictures of the correct stage.

- Teacher leads the class in the chant one more time.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What worked well?</td>
<td></td>
</tr>
<tr>
<td>What did not work well?</td>
<td></td>
</tr>
<tr>
<td>What would I do differently?</td>
<td></td>
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<tr>
<td>Other comments or notes</td>
<td></td>
</tr>
</tbody>
</table>
Lesson 2 - The Life Cycle of a Frog

<table>
<thead>
<tr>
<th>Lesson 2 of 5</th>
<th>Duration: 30 Minutes</th>
</tr>
</thead>
</table>
| **Objectives** | **I Can:** Oral Language:  
• Identify the stages in the life cycle of a frog.  
Literacy:  
• Recognize words related to the stages in the life cycle of a frog.  
STEM and other subject areas.  
• Identify the stages in the life cycle of a frog. |
| **Performance Assessment** | Students will communicate orally or through physical manipulation the stages of the life cycle of the frog. |
| **Vocabulary and Expressions** | أولاً  
أخيراً  
شرعوف / أبو ذنبية  
ضفيفة صغيرة (ضيفيفة)  
ضيفيفة  
ذنب  
طويل  
قصير  
يبح  
يفتر  
يمشي  
رجل / أرجل  
بُغَع |
http://www.frog-life-cycle.com/  
http://www.coloring.ws/frog1.htm  
http://www.dltk-teach.com/rhymes/frogs/color.htm  
Worksheet 1a – Life Cycle of a Butterfly  
Worksheet 2a – 5 Green and Speckled Frogs (Poem)  
Worksheet 2b – Frog and Log  
Worksheet 2c – The Life Cycle of a Frog  
Toy, puppet, or model frog  
Individual baggies for each student with cut-out pictures of the of the frog  
Crayons or markers, scissors |
<table>
<thead>
<tr>
<th>Key Elements</th>
<th>Lesson 2 Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engagement</strong></td>
<td><strong>Introduce Frog</strong></td>
</tr>
<tr>
<td></td>
<td>T: (Showing students puppet, model, or toy frog)</td>
</tr>
<tr>
<td></td>
<td>معنى صيغة صغيرة وعليها بقع. أنظر إلى البقع—هل ترون؟ بل اذ نبذ على الصيغة.</td>
</tr>
<tr>
<td></td>
<td>(if possible).</td>
</tr>
<tr>
<td></td>
<td>T:</td>
</tr>
<tr>
<td></td>
<td>ماذا في الغرفة عليه بقع؟ (Children are likely to find spots on clothing, pencils,</td>
</tr>
<tr>
<td></td>
<td>pencil cases, etc. For each discovery, respond with:</td>
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<tr>
<td></td>
<td>صحيح. ال________ عليه بقع. هو مربع.</td>
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<td></td>
<td>T: (Using the poem 5 Green and Speckled Frogs (Worksheet 2a), asks</td>
</tr>
<tr>
<td></td>
<td>students to repeat each line after the teacher, using visuals to establish</td>
</tr>
<tr>
<td></td>
<td>meaning.) Five green and spotted/speckled frogs—let’s count them</td>
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<tr>
<td></td>
<td>(Counting with class) sat on a spotted log (Pointing to log and pointing out</td>
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<tr>
<td></td>
<td>spots)...and so on.</td>
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<tr>
<td></td>
<td><strong>Explore</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Frogs have a life cycle too</strong></td>
</tr>
<tr>
<td></td>
<td>T: (Showing egg picture for butterfly life cycle - Worksheet 1a)</td>
</tr>
<tr>
<td></td>
<td>ما هذا؟؟؟ ؟ هذه البيضة. إلى ماذا تغيرت البيضة في قصتنا بالاسم؟ ؟</td>
</tr>
<tr>
<td></td>
<td>إلى دودة. (Showing egg picture from frog life cycle)</td>
</tr>
<tr>
<td></td>
<td>هذه البيضة ثانية. هل في تشابه بين البيضتين أم هناك اختلاف؟ هذه البيضة باضتها ضفادعة.</td>
</tr>
<tr>
<td></td>
<td>إلى ماذا تتغير البيضة الصغيرة؟</td>
</tr>
<tr>
<td></td>
<td>ضفادعة! (Showing picture Worksheet 2d)</td>
</tr>
<tr>
<td></td>
<td>اسم الضفادعة الصغيرة &quot;أبو ذنيبة&quot; أبو ذنيبة يسكن في الماء. أنظر. هل ترون أرجل؟ لا، &quot;أبو</td>
</tr>
<tr>
<td></td>
<td>ذنيبة&quot; له ذنب. هل يستطيع &quot;أبو ذنيبة&quot; أن يمشي؟ لا، في الماء &quot;أبو ذنيبة&quot; لزم يسبح.</td>
</tr>
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<td></td>
<td>(Make a swimming motion with two palms together.)</td>
</tr>
<tr>
<td></td>
<td>إبيش، يا أبو ذنيبة، إبيش.)</td>
</tr>
<tr>
<td></td>
<td>إذا إلى ماذا تغيرت أربوذنيبة؟ إلى ضفادعة صغيرة.</td>
</tr>
<tr>
<td></td>
<td>ضفادعة صغيرة!</td>
</tr>
<tr>
<td></td>
<td>نعم، اذ نوش صورة صرورة الضفادعة الصغيرة (الضفادعة). ماذا ترون؟ كيف الضفادعة؟ هل</td>
</tr>
<tr>
<td></td>
<td>لها أرجل؟ نعم، الضفادعة الصغيرة لها أرجل. هل تستطيع الضفادعة أن تمشي؟ لا، الضفادعة</td>
</tr>
<tr>
<td></td>
<td>لا تستطيع أن تمشي بالرغم أن لها أرجل. لكن، تستطيع أن تسبح وأن تقفز.</td>
</tr>
<tr>
<td></td>
<td>(Make a swimming motion with two palms together.)</td>
</tr>
<tr>
<td></td>
<td>&quot;إبيش، يا ضفادعة، إبيش!&quot;</td>
</tr>
<tr>
<td></td>
<td>ما هو الاختلاف؟ (Showing the picture of a frog)</td>
</tr>
<tr>
<td></td>
<td>ليس لها ذنب:</td>
</tr>
<tr>
<td></td>
<td>لها أرجل: S1:</td>
</tr>
<tr>
<td></td>
<td>صحيح، أنظروا إلى الضفادعة. هل للضفادعة ذنب؟ هل لها أرجل؟ كم رجلة؟ أنظروا إلى</td>
</tr>
<tr>
<td></td>
<td>أقدامها. هذه الأقدام جيدة للسباحة. الضفادعة تستطيع أن تسبح. هل رأيتم ضفتة تقفز؟</td>
</tr>
<tr>
<td></td>
<td>صحيح. الضفادع (Making swimming motion)</td>
</tr>
<tr>
<td></td>
<td>إبيش، يا ضفادعة، إبيش! (Making jumping motion)</td>
</tr>
<tr>
<td></td>
<td>&quot;أفيزي، يا ضفتة، أفيزي!&quot;</td>
</tr>
<tr>
<td></td>
<td>إبيش، يا ضفادعة، إبيش! (Making swimming motion)</td>
</tr>
<tr>
<td></td>
<td>&quot;أفيزي، يا ضفتة، أفيزي!&quot;</td>
</tr>
<tr>
<td>Key Elements</td>
<td>Lesson 2 Procedures</td>
</tr>
<tr>
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</tr>
</tbody>
</table>
| T: هل تغير الضفدعة شكلها؟ يلا نشو فماذا يحدث للضفدعة. (Worksheet 2c) | T: (Guiding students to the pictures of egg, tadpole, and frog.) الضفدعة تتغير من بيضة إلى أبو ذنبة وإلى ضفدعة. 
T: أين البيضة؟ أروني أبو ذنبة؟ الضفدعة؟ ما هو عدد المراحل؟ كيف يتحرك أبو ذنبة؟ كيف تتحرك الضفدعة؟ 
S: (Answer accordingly) |

**Explanation**
- Students explain their understanding of concepts and processes.
- New concepts and skills are introduced as conceptual clarity and cohesion are sought.

**Naming the stages of the life of a frog**
T: (Showing Worksheet 2c, teacher names stages of life cycle) أين البيضة؟ أبو ذنبة؟ الضفدعة؟ S: (Students repeat and answer questions) 
T: (Using the cut-apart stages of the life cycle of a frog: 3 large pictures of the stages of the frog and smaller cut-apart pictures in envelopes or zippered plastic bags. (Worksheet 2d) 
T: .. (Asks students to repeat the name of each stage.) 
S: (Hold up appropriate picture and name stage.)

**Elaboration**
- Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.

**Which comes first?**
T: (Referring to pictures, gesturing and asking comprehension questions) من أصغر؟ الضفدعة أم البيضة؟ 
S: (Students respond to guided questions about first stage, last stage, color, size and movement.)

**Evaluation**
- Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.

**Assessment: Let’s Make a Frog Book**
T: (Reviews order of life cycle.) 
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 pictures and words in order to form the book.
<table>
<thead>
<tr>
<th>Teacher Reflection on Lesson 2 - <em>The Life Cycle of a Frog</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What worked well?</strong></td>
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<tr>
<td><strong>What did not work well?</strong></td>
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<td><strong>What would I do differently?</strong></td>
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<tr>
<td><strong>Other comments or notes</strong></td>
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</tbody>
</table>
Lesson 3 - The Life Cycle of a Person

### Objectives

**I Can:**
- Oral Language:
  - Identify the stages in the life cycle of a human.
- Literacy:
  - Recognize words related to the stages in the life cycle of a human.
- STEM and other subject areas:
  - Identify the stages in the life cycle of a human.

### Performance Assessment

Students will communicate orally or through physical manipulation the stages of the life cycle of a human.

### Vocabulary and Expressions

- شخص
- طفل / رضيع
- ولد / بنت
- مراهق
- راشد /ة
- رجل أو إمرأة
- الأول / أولاً
- الثاني / ثانياً
- الثالث / ثالثاً
- الرابع / رابعاً

### Materials/Resources

- [http://www.kellyskindergarten.com/science/science_center_activities.htm](http://www.kellyskindergarten.com/science/science_center_activities.htm)
- [http://tuxpaint.org/](http://tuxpaint.org/) (Use for the website to draw what they expect to look like as an adult.)
- Large calendar in target language
- Crayons or markers
- Worksheets 3a, 3b
**Engagement**

- **Object, event or question used to engage students.**
- **Connections facilitated between what students know and can do.**

**Who are you?**

Put cut-up pictures of stages of butterfly and frog life cycles into zipper bags, one bag per group (***Worksheet 1a, Worksheet 2a***). Divide students into groups (preferably 4 students per group). Teacher gives one bag to each group. Students sort pictures by stages of the life of the butterfly or the frog. Each student holds one picture of the stage.

Teacher leads students in TPR activities, using a different motion for each stage:

**Butterfly groups:**
- Egg: right fist on the back of the open left hand
- Caterpillar: one hand “crawling” up the other arm
- Chrysalis: hands beside cheek, as if sleeping
- Butterfly: thumbs linked and hands waving

**Frog groups:**
- Egg: right fist on the back of the open left hand
- Tadpole: closed elbows and use both hands making swimming motions
- Froglet: still closed elbows, kneeling down and making hopping motion
- Frog: stand up and hop.

**Exploration**

- **Objects and phenomena are explored.**
- **Hands-on activities, with guidance.**

**People have a life cycle, too!**

T: (Asking a student to stand next to him/her)

ماذا تعتقد سيحدث للشخص؟ هل يتغير؟ ما هو الاختلاف بين _______ و بيني؟

انت أكبر؟

T: جيد. انا أكبر.

ذات مرة كنت _______ ولكن ماذا كنت قبل ذلك؟

انت _______؟

S: طفلاً!
## Change Can Be Good
التغيير جيد!

<table>
<thead>
<tr>
<th>Key Elements</th>
<th>Lesson 3 Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T:</strong> سندرس دورة حياتنا نحن—انا وأنت. هل تعتقد أننا نتغيّب كالضفدع أو كالفراشة؟ &lt;br&gt; <strong>S:</strong> نعم / لا &lt;br&gt; <strong>T:</strong> (Showing large pictures of the stages of a human <strong>Worksheet 3a</strong>) من يأتي أولًا؟ (second, third, etc) &lt;br&gt; <strong>S:</strong> (Answers) &lt;br&gt; هذا طفل رضيع. أنت طفل؟ <strong>S:</strong> لا &lt;br&gt; <strong>T:</strong> صحيح. أنت أكبر. هل الرضيع يمشي أو يزحف؟ &lt;br&gt; <strong>S:</strong> يمشي / يزحف &lt;br&gt; الوضيع يكبر ويkehr، ويلعب ويلعب. وبعد ذلك الطفل يكبر مثلك. هل أنت ولد كبير / بنت كبيرة الآن؟ <strong>S:</strong> نعم، أنا وليد كبير / بنت كبيرة. &lt;br&gt; <strong>T:</strong> أنت ولد كبير / بنت كبيرة &lt;br&gt; <strong>S:</strong> هل أنت أكبر أم أصغر من الطفل؟ &lt;br&gt; هل تمشي أم تزحف؟ &lt;br&gt; هل تستطيع أن تتفق لوحدك؟ &lt;br&gt; هل يستطيع الرضيع أن يمشي مثلك؟&lt;br&gt; <strong>T:</strong> الولد الكبير / البنت اكبر، ويتعلم وثم يصير مراهق! هل أنت مراهق؟ في مراهق في عائلتك؟ &lt;br&gt; <strong>S:</strong> من أكبر المراهق؟ &lt;br&gt; <strong>T:</strong> المراهق يكبر وصبح رجل. من أكبر الرجل أم المراهق؟ &lt;br&gt; <strong>S:</strong> الرجل &lt;br&gt; هل تعرف رجلاً / امرأة؟ &lt;br&gt; <strong>S:</strong> (Name people in their lives, perhaps parents, teachers. If needed, Teacher can prompt with: هل ____ رجلا؟ (name of principal) من غيره رجلاً أيضاً؟) &lt;br&gt; <strong>T:</strong> (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.)</td>
<td></td>
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</tbody>
</table>

### Explanation
- Students explain their understanding of concepts and processes.<br>- New concepts and skills are introduced as conceptual clarity and cohesion are introduced.
## Change Can Be Good
### التغيير جيد

<table>
<thead>
<tr>
<th>Key Elements</th>
<th>Lesson 3 Procedures</th>
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</table>

### Elaboration
- Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.

#### Matching pictures to stages
Show pictures of people in various stages of life and ask students to identify the stage. *(Worksheet 3c)*

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.)

أروني أي صورة تاني أولاً.

T: من الأول؟

S: الرضيع

T: صحيح

Teacher leads students to chant:

الرضيع أولانآنا أكل ولعب
الطفل ثانيآنا ألعب ولتعلم
المراهق ثالثآنا أتعلم وأكبر
الرجل أخيرآآني شغل كثير

الحياة جميلة في كل مرحلة

### Evaluation
- Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.

#### I am a big person now
Have students draw a picture of what they think they will look like as an adult. Download the program [http://tuxpaint.org/](http://tuxpaint.org/), use the Microsoft program “Paint” to create drawings on a computer, or give the students paper and markers.
<table>
<thead>
<tr>
<th>Teacher Reflection on Lesson 3 - <em>The Life Cycle of a Person</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What worked well?</strong></td>
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<tr>
<td><strong>What did not work well?</strong></td>
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<tr>
<td><strong>What would I do differently?</strong></td>
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<tr>
<td><strong>Other comments or notes</strong></td>
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</tbody>
</table>
### Lesson 4 – Same but Different

<table>
<thead>
<tr>
<th>Lesson 4 of 5</th>
<th>Duration: 30 Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives</strong></td>
<td>Students will be able to identify the differences in the life cycles of the butterfly, the frog and a person.</td>
</tr>
<tr>
<td><strong>Performance Assessment</strong></td>
<td>Students will present their posters about the stages of life of the butterfly, frog, and person.</td>
</tr>
<tr>
<td><strong>Vocabulary and Expressions</strong></td>
<td>هناك / في / تشابه / اختلاف</td>
</tr>
</tbody>
</table>
| **Materials/Resources** | 3 work stations (1/each animal)  
Cut out pictures of stages of life cycles  
Large paper to be used for posters  
Coloring materials  
Glue  
Calendar  
Book: The Very Hungry Caterpillar, Eric Carle |

### Key Elements

<table>
<thead>
<tr>
<th>Engagement</th>
<th>Lesson 4 Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Review the ordinal numbers</strong></td>
<td>T: (Referring to calendar.) هل تعترفون أيام الأسبوع؟ (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. Continue through days of week, but not asking for them in order.)</td>
</tr>
<tr>
<td>Key Elements</td>
<td>Lesson 4 Procedures</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------</td>
</tr>
</tbody>
</table>
| **Exploration** | **Review life cycles**  
T: (Referring to the book, *اليرقة الجائعة جداً*, reviews story and metamorphosis to butterfly.)  
ماذا أكلت الدودة أولاً؟ بماذا أكلت أخيراً؟ كم أسبوعاً بقيت بالشرفة (الكاكو؟) أي كاتب البيض؟  
S: (Answer appropriately)  
T: (Referring to pictures of the life cycle of the frog, *Worksheet 2e*, asks questions.  
الضفدعَة لها دورة حياة أيضاً! تلاحظون مراحل دورة حياة الضفدعَة؟  
(Showing pictures)  
هل هذا "أبو ذنيبة" أو بيضة؟ ما هو عدد المراحل التي تراها؟  
S: (Answer appropriately)  
T: (Referring to stages of life pictures for human asks questions.)  
ما هو عدد المراحل التي تراها؟ أي مرحلة أولاً؟ وثانياً ...  
S: (Answer appropriately)  
T: (To Student 1) Ask (Student 2)  
ماذا يأتي أولاً؟ (Etc.) |
| **Explanation** | **Which came first?**  
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 *Worksheets 1a, 2e, and 3a.*)  
الآن، رتبوا هذه الصور على الطاولة: أولاً، ثانياً، ثالثاً، ... تستطيعون أن تساعدوا بعضكم البعض.  
S1 to S2: (Etc.) |
| **Elaboration** | **Making posters**  
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.  
S1 to S2: (Etc.) |
### Key Elements

**Evaluation**
- Students assess their knowledge, skills and abilities. Activities permit evaluation of student development and lesson effectiveness.

### Lesson 4 Procedures

**Presenting posters**

T: اريني صورة بوستار. ما هذا؟ (1) To Student 1 (Show us a poster. What is it?)

S: هذه فراشة

T: ما هي مراحل دورة حياة الفراشة؟ ماذا يأتي أولاً؟

S: (Answers appropriately)

Students present posters to class, telling what life cycle they are depicting and naming the stages.

T: ما هو التشابه بين الفراشة، والضفدع، والشخص؟

S: (With teacher guidance) كلهم عندهم دورة حياة

T: ما هو الاختلاف؟

S: (With teacher guidance) المراحل تختلف
<table>
<thead>
<tr>
<th>What worked well?</th>
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<tbody>
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<table>
<thead>
<tr>
<th>What did not work well?</th>
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<table>
<thead>
<tr>
<th>What would I do differently?</th>
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<thead>
<tr>
<th>Other comments or notes</th>
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</tbody>
</table>
Lesson 5 - Hear My Voice! - Assessment

| Objectives | Students will be able to engage in interactive communication with classmates, asking and answering questions about life cycles. |
| Performance Assessment | Students will identify and describe the changes that occur in people as they develop in a VoiceThread |
| Vocabulary and Expressions | No new vocabulary or expressions |
| Materials/Resources | Teacher-created VoiceThread, [http://www.voicethread.com](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. |

| Key Elements | Lesson 5 Procedures |
| Engagement | Review ordinal numbers |
| Object, event or question used to engage students. | T: (Asking students to line up, four at a time. Review who is first, second, etc. in line.) من الأول...الثاني...؟ (Student’s) S: (Answer with students’ names.) هل تستطيع أن تتحدث عن صور البوستار. هذه فراشة. من الأول؟ من الثاني؟ من الثالث؟...؟ S: (Answers) T: (Continue asking questions about other sample posters) من الأول؟ من الثاني؟ من الثالث؟...؟ |
| Connections facilitated between what students know and can do | T: (Ask students to describe using vocabulary for colors, sizes and stages.) |
## Key Elements

### Exploration
- Objects and phenomena are explored.
- Hands-on activities, with guidance.

### Reinforcement of the content

<table>
<thead>
<tr>
<th>Teach each student his/her poster</th>
</tr>
</thead>
<tbody>
<tr>
<td>هل تستطيع أن تقول لجارك ما هي مراحل دورة الحياة لصورتك المفضلة؟</td>
</tr>
<tr>
<td>S: (Talk together and name stages.)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Teach helping students to explain their posters to each other</th>
</tr>
</thead>
<tbody>
<tr>
<td>أسمى-----------------</td>
</tr>
<tr>
<td>صورتي عن_________</td>
</tr>
<tr>
<td>الأربعة مراحل هي___________</td>
</tr>
<tr>
<td>بالنسبة لي المرحلة الأفضل هي__________</td>
</tr>
</tbody>
</table>

### Explanation
- Students explain their understanding of concepts and processes.
- New concepts and skills are introduced as conceptual clarity and cohesion are sought.

### Let's record our voices.

<table>
<thead>
<tr>
<th>Demonstrate how to record and shares a sample VoiceThread for a butterfly or a frog.</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Teach helping students to explain their posters to each other</th>
</tr>
</thead>
<tbody>
<tr>
<td>أسمى-----------------</td>
</tr>
<tr>
<td>صورتي عن_________</td>
</tr>
<tr>
<td>الأربعة مراحل هي___________</td>
</tr>
<tr>
<td>بالنسبة لي المرحلة الأفضل هي__________</td>
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</tbody>
</table>

### Elaboration
- Activities allow students to apply concepts in contexts, and build on or extend understanding and skill.

### Recording

<table>
<thead>
<tr>
<th>Assist with student recording</th>
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</table>

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.
## Change Can Be Good
## التغيير جيدًا!

<table>
<thead>
<tr>
<th>Key Elements</th>
<th>Lesson 5 Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>Invite students to choose, or suggest from the following</td>
</tr>
<tr>
<td>- Object, event or question used to engage students.</td>
<td>Five little spotted frogs, What were you before? Egg, tadpole, froglet, then frog I swim and jump some more.</td>
</tr>
<tr>
<td>- Connections facilitated between what students know and can do</td>
<td>Pretty little butterfly, What were you before? Egg, caterpillar, chrysalis, butterfly free I fly and fly some more.</td>
</tr>
<tr>
<td></td>
<td>Look at all the big adults What were you before? Baby, child, teen, then adult, I grow and grow some more.</td>
</tr>
</tbody>
</table>
# Teacher Reflection on Lesson 5 - *Hear My Voice!* - Assessment

<table>
<thead>
<tr>
<th>Question</th>
<th>Reflection</th>
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<tbody>
<tr>
<td>What worked well?</td>
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<td>What did not work well?</td>
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<tr>
<td>What would I do differently?</td>
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