# Creating Autonomy, Mastery, & Purpose using Assessment Criteria

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presentation link:

http://goo.gl/hjdOsp

**Also, please open your subject guide and *MYP: From principles into practice* on the OCC.**

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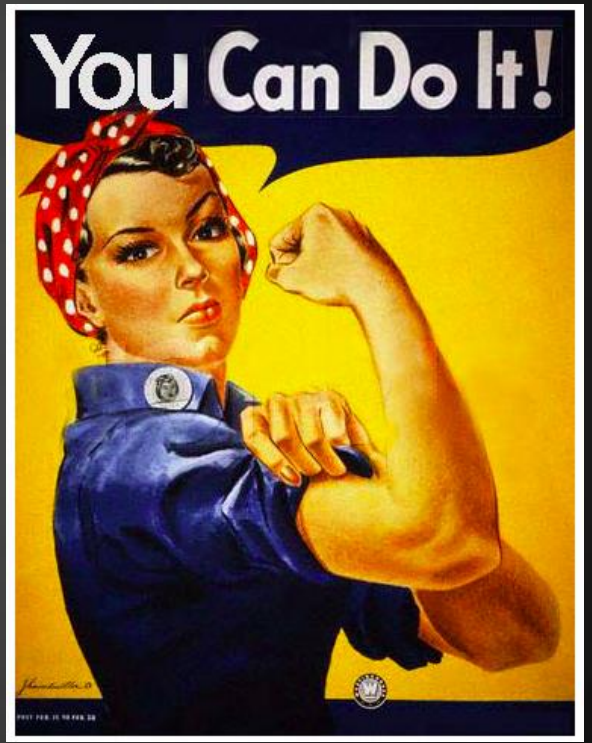
http://www.computerhowtoguide.com/wp-content/uploads/2013/06/cluttered-office.jpg

# Our driving question...

What teaching practices and learning experiences empower students so they want to, can and, do manage their own learning?

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# Overview of our time together...

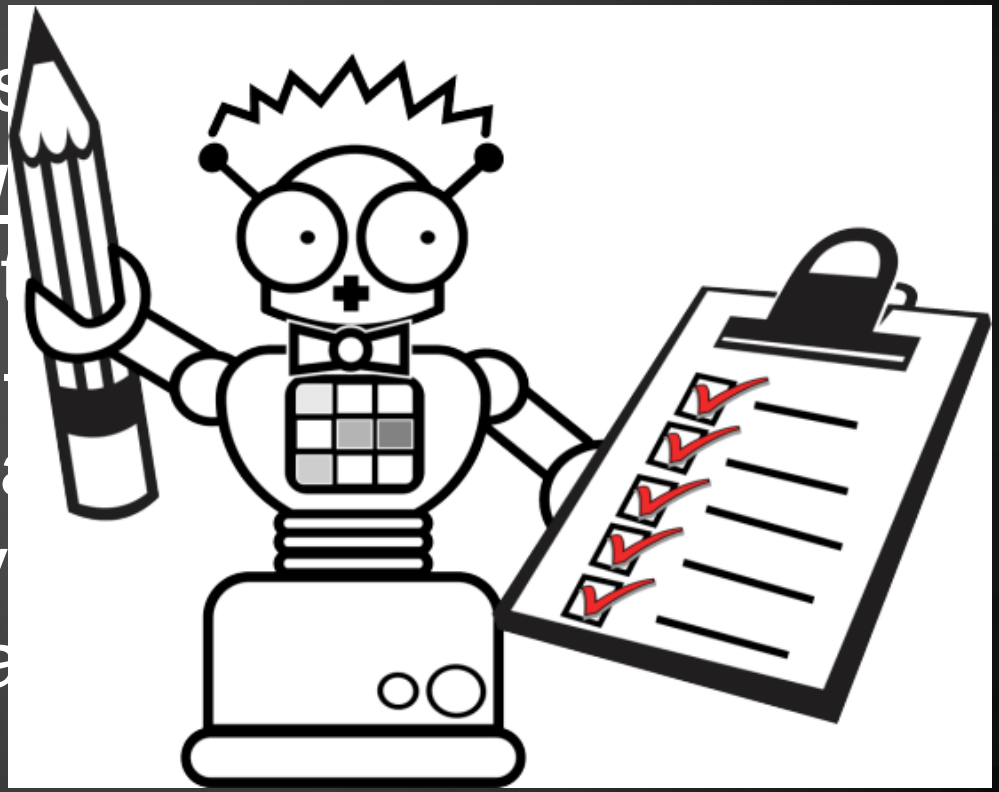
Part 1: “Macro-view”

- Research/Theory
- Command Terms

Part 2: “Micro-view”

- Objectives/ Assessment Criteria
- Daily Learning Outcomes

# Autonomy: Engagement *vs.* compliance

# Mastery: Finding the "Goldilocks" tasks (just right)

"If you are doing something easy, you are never going to improve; if you are doing something too hard, you are not going to succeed, so you won't improve that way, either."
-Daniel Pink

http://www.trovarsinrete.org/1circolo/english%20corner/goldilocks/e-bk-easy-readers-04goldilocks-pic3-anim.gif

# **Purpose**: Uncovering the "why"

"Research has shown that people do better at a task...if they know *why* they are doing it in the first place."

-Daniel Pink

"The simplest, most important performance-enhancing tip...is to have two fewer conversations about *how* to do something and two more conversations about *why* they're doing it."

-Daniel Pink

# What the MYP says about command terms...

"Each **command term** refers to specific **thinking skills, practices and processes** that constitute a subject or discipline, **along with its content**. In order to understand a discipline, which is a particular **way of knowing**, it is necessary to be fluent in the relevant command terms."

"Most command terms are applicable across subject groups."

MYP: From principles into practice (p. 82)

# What the MYP says about command terms...

Having a consistent definition of a command term **enables students to understand the meanings and their application across disciplines**. This clarity of terminology is especially important for students with diverse learning needs and complex language profiles. **Consistent application** of command terms **reduces stress and confusion** about their meaning, and **empowers students** to **manage their own learning** and transfer cognitive processes and academic skills.

MYP: From principles into practice (p.82)

## Questions to consider about ourselves as teachers...

To what extent do ***we as teachers*** understand the expectations of the command terms?

## Questions to consider about ourselves as teachers...

**To what extent do we provide learning experiences specifically designed to develop the skills, practices, and processes that are described by the command terms and that will support the type of thinking necessary for students to reach and demonstrate learning at their highest achievement levels ?**

# Excerpt from Criterion A: Knowledge and understanding for Year 1 sciences

What can you now identify is the difference between "*apply*" and "*interpret*"?

And, more importantly, what do our students "need" in order to be able to recognize (on their own) <u>when</u> and <u>HOW</u> they should APPLY or INTERPRET?

**<u>apply-</u>** use knowledge and understanding in response to a given situation real circumstances. Use an idea, equation, principle, theory, or law in relation to a given problem or issue. (See also "use.")

**<u>Use-</u>** apply knowledge or rules to put theory into practice

**<u>interpret-</u>** use knowledge and understanding to recognize trends and draw conclusions from given information.

*MYP: From principles into practice (App. 3)*

# Turn & Talk (Apply *vs*. Interpret)

- What are the thinking skills necessary to *apply* information as opposed to *interpret* information?
- When do those different skills “come into play” in your subject area?
- What might be some ways to support your students to be able to learn when and HOW to *apply* and *interpret* information?

# tter understand

rms


Assessed curriculum

## Sciences assessment criteria: Year 1

### Criterion A: Knowing and understa

Maximum: 8

At the end of year 1, students should be able to:

i. outline scientific knowledge

ii. apply scientific knowledge and understanding to solve problems solutions to problems set in unfamiliar situations

iii. interpret information to make scientifically supported judgments

| Achievement level | Level descriptor |
|---|---|
| 0 | The student does not reach a standard describe |
| 1–2 | The student is able to:<br>i. **select** scientific knowledge<br>ii. **select** scientific knowledge and unders problems set in **familiar situations**<br>iii. **apply** information to **make judgments,** |
| 3–4 | The student is able to:<br>i. **recall** scientific knowledge<br>ii. **apply** scientific knowledge and unders problems set in **familiar situations**<br>iii. **apply** information to **make judgments.** |
| 5–6 | The student is able to:<br>i. **state** scientific knowledge<br>ii. **apply** scientific knowledge and unders **familiar situations**<br>iii. **apply** information to **make scientifically** |
| 7–8 | The student is able to:<br>i. **outline** scientific knowledge<br>ii. **apply** scientific knowledge and unders **familiar situations** and **suggest soluti situations**<br>iii. **interpret** information to **make scientific** |



Thesaurus.com account

account

It's gone. Undo

What was wrong with this ad?

Inappropriate Repetitive Irrelevant

**account** see definition of account Like +1 Aa show all

*noun* **written description of past events** | *noun* **record of finances, fees, or charges** | *noun* **basis or consideration fo**



Relevance A-Z Complexity + Length +

**Synonyms** for account

Common Informal

*noun* **written description of past events**

| | | | | |
|---|---|---|---|---|
| detail | story | chronicle | tab | play by play |
| explanation | tale | make | take | run-down |
| history | version | narration | annal | the picture |
| narrative | ABCs | recital | blow by blow | the whole picture |
| report | bulletin | score | lowdown | |

Appendices

## Appendix 3: MYP command terms

ge of learning objectives and assessment criteria in MYP subject groups. e the level of thinking and type of performance (or behaviour) that is sely related to general and subject-specific ATL skills, and they make ary that informs teaching and learning in the MYP.

d terms used to establish learning outcomes and assessment objectives are identified with an asterisk.

| | |
|---|---|
| | in order to bring out the essential elements or structure. To identify lationships, and to interpret information to reach conclusions. |
| | otes to a diagram or graph. |
| | edge and understanding in response to a given situation or real es. Use an idea, equation, principle, theory or law in relation to a given issue. (See also "Use".) |
| | merical answer showing the relevant stages in the working. |
| | rder by class or category. |
| | ment based on a given statement or result of a calculation. |
| | ount of the similarities between two (or more) items or situations, both (all) of them throughout. |
| | ount of the similarities and differences between two (or more) items or eferring to both (all) of them throughout. |
| | rmation in a diagrammatic or logical form. |
| | ount of the differences between two (or more) items or situations, both (all) of them throughout. |
| | m one's own thought or imagination, as a work or an invention. |
| | itical review or commentary, especially when dealing with works of art . (See also "Evaluate".) |
| | clusion from the information given. |
| | cise meaning of a word, phrase, concept or physical quantity. |
| | by reasoning or evidence, illustrating with examples or practical application. |
| Derive | Manipulate a mathematical relationship to give a new equation or relationship. |

# Now you try...

- Look at the command terms used in the 5/6 vs. 7/8 achievement levels of your subject guide
- Look at the definition of the command terms in Appendix 3 (pg. 108) of MYP: From principles into practice and identify the differences

- **What would your students have to do or produce in order to demonstrate they have the skill level described by the different command terms?**

# Some questions to consider about our students...

- To what extent do ***our students*** understand the expectations of the command terms?

- To what extent do our students **independently use** the **assessment criteria** and **command terms** to **inform and guide their work**?

## Turn and talk

What did you discover about the command terms for the 5/6 and 7/8 achievement levels?

My “journey” with the command terms...

# Increasing student awareness and empowerment, v. 2

| Criterion C: Knowledge and understanding of science | | | |
|---|---|---|---|
| Strand 1 | *Recalls some* scientific ideas, concepts, and/or processes<br><br>Here are some examples of why I think I do this in my assessment: | *Describes* scientific ideas, concepts, and/or processes<br><br>Here are some examples of why I think I do this in my assessment: | *Uses* scientific ideas, concepts, and/or processes *correctly to construct scientific explanations*<br><br>Here are some examples of why I think I do this in my assessment: |
| Strand 2 | Applies scientific understanding to *solve simple problems*<br><br>Here are some examples of why I think I do this in my assessment: | *Analyzes and breaks down a familiar problem* and *applies appropriate scientific principles or methods* to solve the different aspects of the problem<br><br>Here are some examples of why I think I do this in my assessment: | *Analyzes and breaks down an unfamiliar problem* (a problem that is new for you) and *applies appropriate scientific principles or methods* to solve the different aspects of the problem<br><br>Here are some examples of why I think I do this in my assessment: |

Increasing student awareness and empowerment, v. 3

## KNOWING AND UNDERSTANDING SCIENCE (Gr. 7-8)

From the work you have done on the assessments, what have you been able to do to...?

| **1) SHOW KNOWLEDGE** of science | **Assessment:** **Date:** | **Assessment:** **Date:** |
|---|---|---|
| I can remember scientific ideas when asked questions. | *I think I have done this because in my assessment I:* | *I think I have done this because in my assessment I:* |
| I can give a scientific name or short answer (but no explanations). | *I think I have done this because in my assessment I:* | *I think I have done this because in my assessment I:* |
| I can give a short summary of scientific ideas. | *I think I have done this because in my assessment I:* | *I think I have done this because in my assessment I:* |
| I can give a detailed description of a scientific process, situation, event, or pattern. | *I think I have done this because in my assessment I:* | *I think I have done this because in my assessment I:* |

# Connections between daily learning outcomes and autonomy, mastery, and purpose

- build a sense of self-efficacy (belief that they CAN be successful)

- strategic, self-regulators (can begin to make choices about their own success)

http://www.wheelofpersuasion.com/wp-content/uploads/2013/05/Self-Effacy.jpg

- **“The single most important method for routinely sharing learning targets is using assignments that match—really match—the learning goal.”**

- **“The student will strive to do the assignment, not the abstract goal. "If I can do [this assignment], then I can do [the learning objective]."”**

- **“Teachers should always share their goals for students' learning.”**

**Source:**

Moss, Connie M., and Susan M. Brookhart. *Advancing Formative Assessment in Every Classroom: A Guide for Instructional Leaders*. Alexandria, VA: Association for Supervision and Curriculum Development, 2009. Print.

# Objectives/ SOI/ Criteria/ Assessment Tasks into Student Outcomes

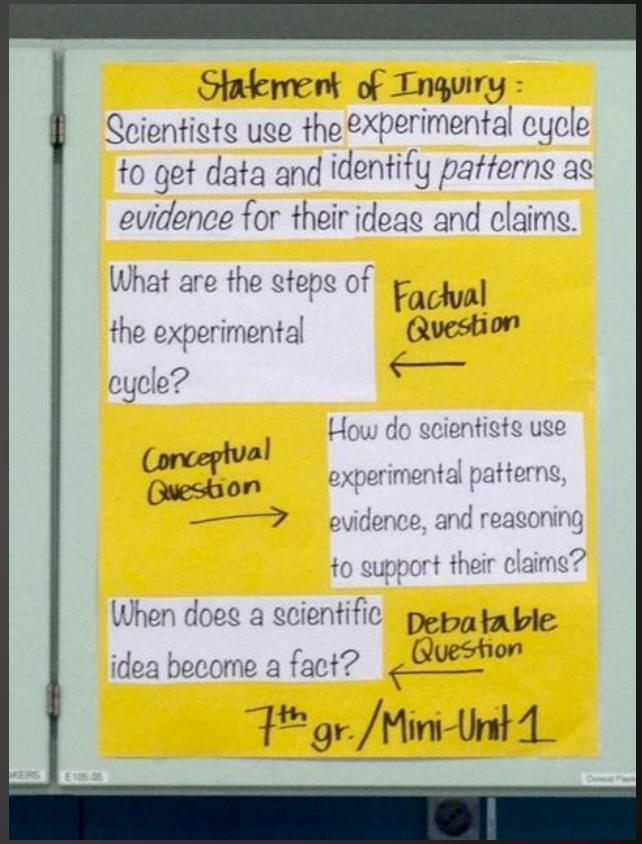
## Year 2: Objective B: Inquiring & Designing

ii. outline a testable hypothesis and explain it using scientific reasoning

## Criteria B: Level 7/8:

i. outline and explain a testable hypothesis using correct scientific reasoning

ii.



**Progression of Student Outcomes (shared with students):**

- **I can create a scientifically supported, testable hypothesis.**
  - I can define “hypothesis.”
  - I can identify the differences between a testable and untestable hypothesis.
  - I can create a testable hypothesis using the words, “if,” “then,” and “because.”
  - I can identify scientific reasoning that will support my hypothesis.

# ‘Check-In’ For Understanding- “Just in Time”
## (Did we meet today’s outcome?)


| | |
|---|---|
| Senan | **If** I switch on the bluetooth for 10 minutes documenting my battery, **then** it will decrease the battery and use it up more.**Because** using bluetooth is another thing for my laptop to think about so it usjes up more battery |
| Summer | **If** I open every applications open for 5 hours, **then** my battery will decrease **because** it’s too much for the macbook to have 61 applications open. |
| Raphaela | **If** (keep all the applications open during a whole school day) **then** (the battery life will decrease more quickly than usual) **because** (the applications are still loading, even if you aren’t using them) |
| Braxton | ***If***(increasing the brightness to the max during the whole school day) ***Then*** (the battery will decrease more quickly) ***Because*** (the brightness takes a lot of energy) |
| Francesco | **If** I (put many videos in the background (Sound muted) for 5 minutes) **Then** (the battery life will decrease rapidly) **Because** lots of movement on screen requires light and light burns battery). |
| Philipp | If I open each application during a whole hour I think the battery will decrease faster. |
| Ienni | if i leave bluetooth on for the whole day then the battery will decrease faster because bluetooth also needs batter it deos not just get the electricity from nowhere |

- Quick verbal check-in with each student
- Checking in with each student’s paper/screen
- Thumbs up/down/middle
- Ticket Out the Door
- Google Doc
- Schoology/Edmodo
- Quiz

We start and end each day with the outcome.

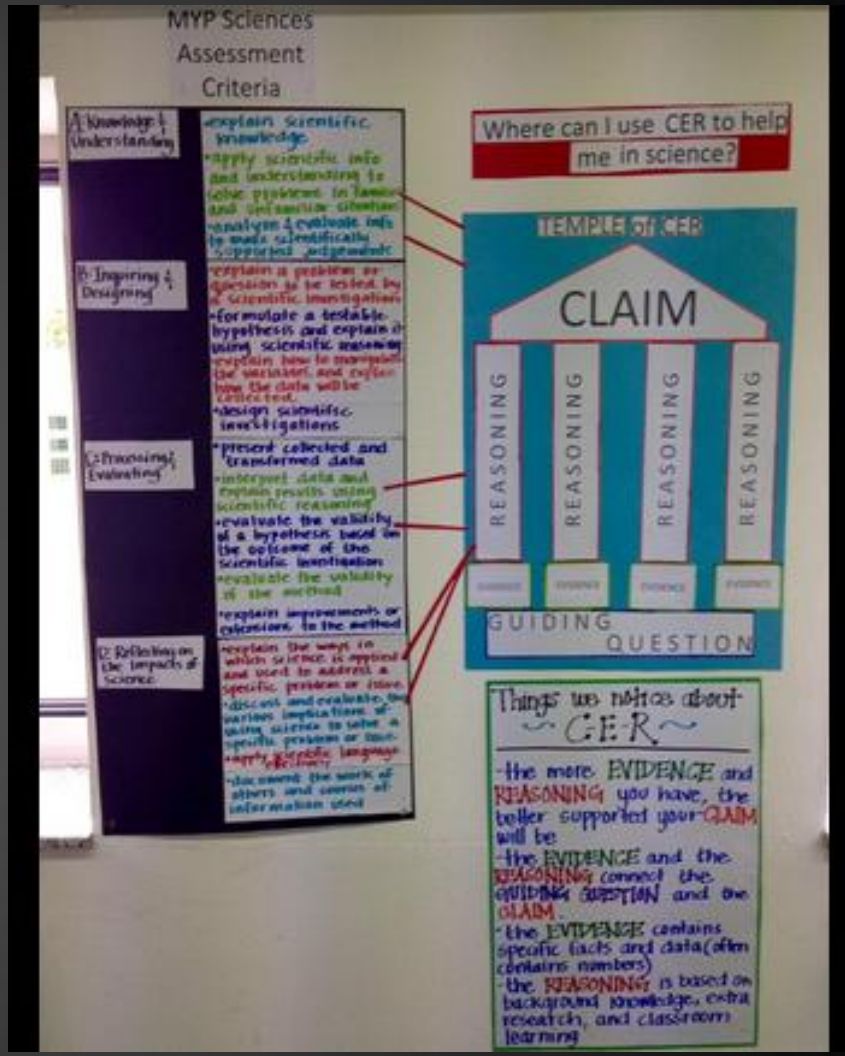
# Beginning a Unit with Outcomes

| Student Expectations/Learning Outcomes | Graded Assessment Task |
|---|---|
| **I can explain how and why life changes over time.**<br><br>I can explain how genes/ traits move through families and populations.<br><br>I can explain the difference between mutations and variations and how these affect organisms and populations.<br><br>**I can link the changes in the earth's surface and atmosphere with changes in living things over time.**<br><br>I can define adaptation.<br><br>I can explain why some adaptations are better than others.<br><br>I can explain why some organisms and populations survive while others do not.<br><br>I can explain how and why certain adaptations are specific to certain animals.<br><br>I can make a prediction supported by scientific evidence.<br><br>I can explain natural selection. | **Task:**<br>Based on predictions from Units 1 & 2, students will predict the future adaptations of ONE species that will live in _____ in the future.<br><br>• These predictions will be based on real adaptations of animals of today in similar climates.<br><br>• Students will explain how their creature's adaptations show evolution/natural selection.<br><br>**Assessment Criteria**:<br><br>**A: Knowledge & Understanding of Science**<br>**D: Reflecting on the Impacts of Science (iii/iv)** |


- Pass out outcomes on Day 1
- Have students read through them and underline all scientific vocabulary (new or old)
- Create a concept map with background knowledge on the unit
- Add to concept map as each new outcome is achieved

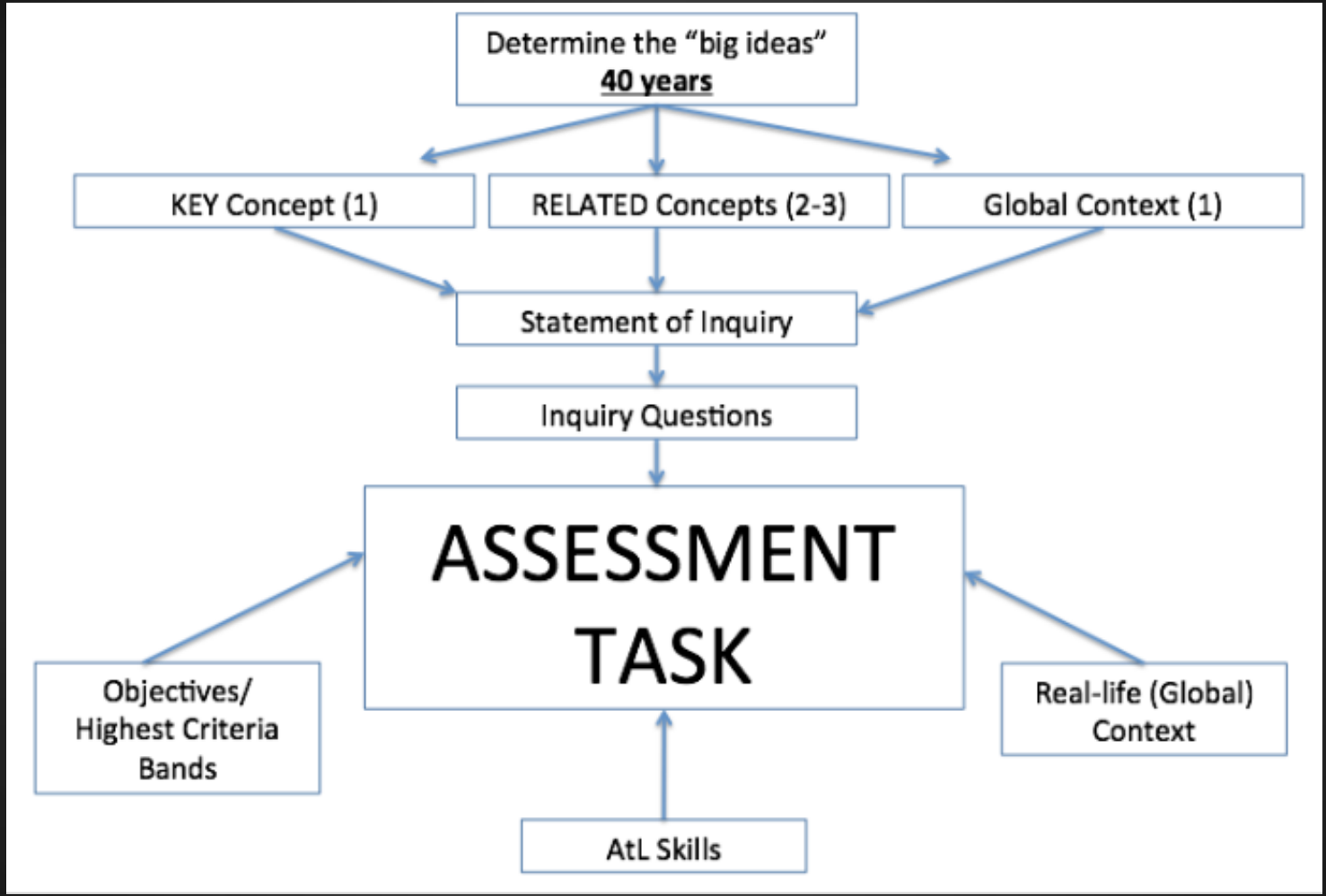
# Linking the Daily with the Long-Term

- Time spent in class leads directly to higher achievement
- Not year level specific
- Constant visual reminder



# Tips for Writing Student Outcomes/Targets

- “Hey, Dad! Watch me!” test for verb choice
- Is the verb appropriate for the type of thinking/level of understanding that a student should have?
- Where in the learning process are we (Gradual Release of Responsibility)?


Determine the "big ideas"
40 years
KEY Concept (1)
RELATED Concepts (2-3)
Global Context (1)
Statement of Inquiry
Inquiry Questions
ASSESSMENT TASK
Objectives/ Highest Criteria Bands
Real-life (Global) Context
AtL Skills

**Assessment Task**: What will students need to know, understand, and do in order to reach the highest band of the criteria for your chosen objectives?

| | |
|---|---|
| Conceptual | (Understand) |
| Factual | (Know) |
| Procedural | (Do) |
| ATL skills | (Do/Have) |

# Fitting into the unit planner...

| Outcome | Learning Engagement | Formative Assessment | Differentiation Strategies |
|---|---|---|---|
| What do students need to **know**, **understand**, and **be able to do** in order to meet the objectives addressed in the unit?<br><br>What **ATL skills** are necessary in order to meet the objectives addressed in the unit?<br>(when possible, use MYP command terms as the verb) | What will students be doing to meet the learning outcome?<br><br>(Include links to assignments) | How will I know that they have met the learning outcome? | How might I change the learning experiences, if necessary, for ALL learners to meet the outcome?<br><br>(include links to differentiated assignments, if necessary) |
| | | | |
| | | | |

# Now you try...

- Choose **one** of your objectives strands/ highest criteria band.

- Create a progression of student learning outcomes that will allow students to achieve the objective


Click here to share and read “top tips” to create autonomy, mastery, and purpose using the assessment criteria.

# Bibliography/Additional Resources

Click here for bibliography