The National Curriculum: differentiation?

The NC states:

- Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content.

- Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.
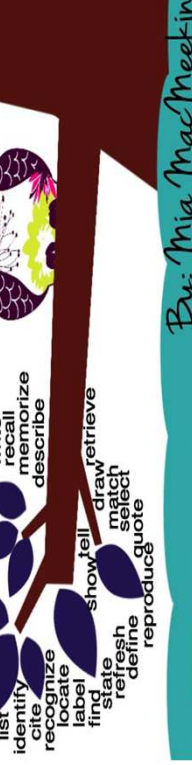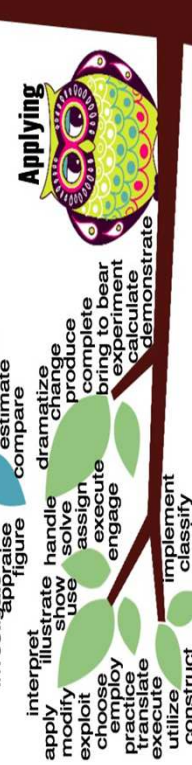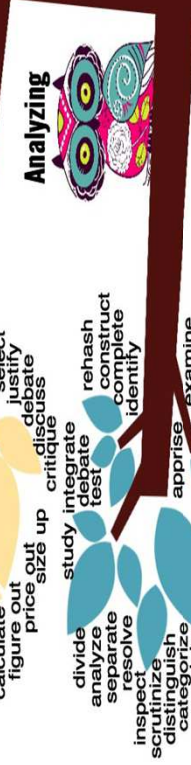
What is Mastery Learning?

- Bloom emphasized his belief that instruction in mastery learning classrooms should focus on higher level learning goals, not simply basic skills.
- Emphasis on problem solving, applications of principles, analytical skills, and creativity. Such higher mental processes this type of learning enables the pupil to relate his or her learning to the many problems in day-to-day living.
- These abilities are regarded as one set of essential characteristics needed to continue learning and to cope with a rapidly changing world.

The NC: a mastery curriculum

- An expectation that all pupils can and will achieve.
- The large majority of pupils progress through the curriculum content at the same pace.
- Differentiation emphasises deep knowledge and individual support/intervention.
- Lessons and resources are crafted carefully to foster deep conceptual and procedural knowledge.
- Practise and consolidation play a central role. Well-designed variation builds fluency and understanding of underlying concepts/skills in tandem.
- Teachers use precise questioning to check conceptual and procedural knowledge. They assess in lessons to identify who requires intervention so that all pupils keep up.
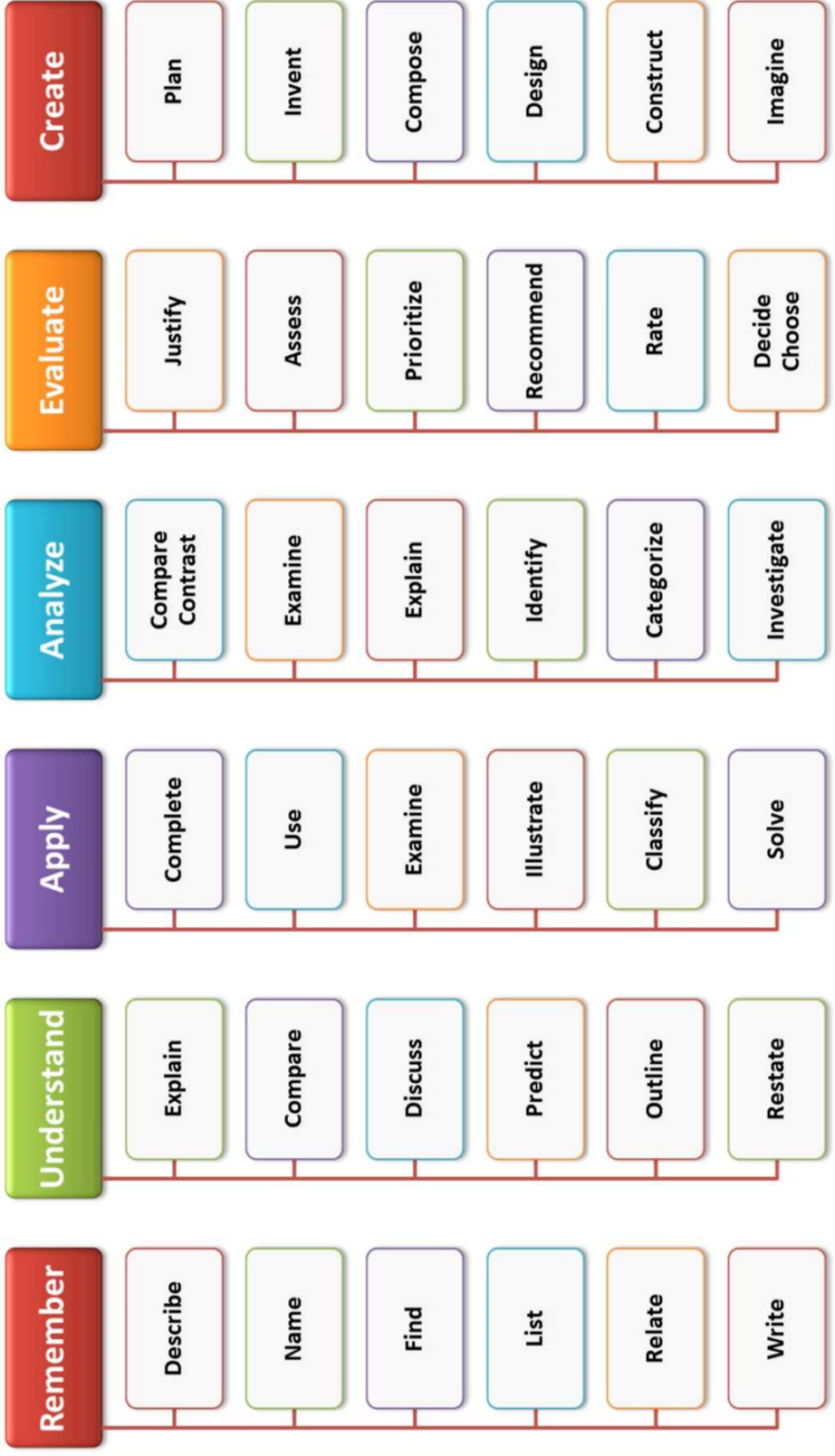
Bloom's revised Taxonomy
with verbs!

Creating

rear
coin build devise
hatch make design
start shape
dream
produce
invest
imagine
author
Create
concoct
fabricate
invent
produce
begin
collect
reorganize
manage
invent
compose
hypothesize
forecast
perform
formulate
propose
fashion form
combine

Evaluating

verify argue
defend convince
estimate recommend
valuate measure
survey criticize
weigh score argue
appraise grade assay
peg rate gauge
rank measure
classify
decide
assess
check
calculate
figure out
price out
size up critique
judge
select
justify
debate
discuss

Analyzing

divide study integrate
analyze debate
separate test
resolve rehash
inspect construct
scrutinize complete
distinguish identify
categorize
explain
investigate
appraise
figure
apprise examine
differentiate
estimate
compare

Applying

interpret dramatize
apply illustrate handle change
modify show solve produce
exploit use complete
choose assign bring to bear
employ execute experiment
practice engage calculate
translate demonstrate
execute
utilize
construct
complete
implement
classify
examine
reorder
extend

Understanding

generalize
perceive
summarize discuss
distinguish describe
generalize catch
contrast restate sense
compare get outline
articulate follow explain
convert note
associate convert
paraphrase predict grasp
estimate determine
conclude
see
relate

Remembering

dig up recollect remind
relive
list write
identify recall
cite memorize
recognize describe
locate
label
find draw retrieve
show tell
match
state select
refresh quote
define
reproduce

By: Mia MacMeekin
of Epigogy, Inc and
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Remember	Understand	Apply	Analyze	Evaluate	Create
Describe	Explain	Complete	Compare Contrast	Justify	Plan
Name	Compare	Use	Examine	Assess	Invent
Find	Discuss	Examine	Explain	Prioritize	Compose
List	Predict	Illustrate	Identify	Recommend	Design
Relate	Outline	Classify	Categorize	Rate	Construct
Write	Restate	Solve	Investigate	Decide Choose	Imagine

Bloom's Taxonomy Action Verbs

Definitions	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Bloom's Definition	Remember previously learned information.	Demonstrate an understanding of the facts.	Apply knowledge to actual situations.	Break down objects or ideas into simpler parts and find evidence to support generalizations.	Compile component ideas into a new whole or propose alternative solutions.	Make and defend judgments based on internal evidence or external criteria.
Verbs	• Arrange • Define • Describe • Duplicate • Identify • Label • List • Match • Memorize • Name • Order • Outline • Recognize • Relate • Recall • Repeat • Reproduce • Select • State	• Classify • Convert • Defend • Describe • Discuss • Distinguish • Estimate • Explain • Express • Extend • Generalized • Give example(s) • Identify • Indicate • Infer • Locate • Paraphrase • Predict • Recognize • Rewrite • Review • Select • Summarize • Translate	• Apply • Change • Choose • Compute • Demonstrate • Discover • Dramatize • Employ • Illustrate • Interpret • Manipulate • Modify • Operate • Practice • Predict • Prepare • Produce • Relate • Schedule • Show • Sketch • Solve • Use • Write	• Analyze • Appraise • Breakdown • Calculate • Categorize • Compare • Contrast • Criticize • Diagram • Differentiate • Discriminate • Distinguish • Examine • Experiment • Identify • Illustrate • Infer • Model • Outline • Point out • Question • Relate • Select • Separate • Subdivide • Test	• Arrange • Assemble • Categorize • Collect • Combine • Comply • Compose • Construct • Create • Design • Develop • Devise • Explain • Formulate • Generate • Plan • Prepare • Rearrange • Reconstruct • Relate • Reorganize • Revise • Rewrite • Set up • Summarize • Synthesize • Tell • Write	• Appraise • Argue • Assess • Attach • Choose • Compare • Conclude • Contrast • Defend • Describe • Discriminate • Estimate • Evaluate • Explain • Judge • Justify • Interpret • Relate • Predict • Rate • Select • Summarize • Support • Value

BLOOM'S TAXONOMY – Sample Questions
Reading and Writing
- **Knowledge**
- 1. Name all the characters in the story.
- 2. Write 6 facts from the story.
- 3. When does the story take place?
- 4. Where does the story take place?
- 5. Which character appears first in the story?
- 6. How does the story end?
- 7. From what you read in the story, describe what the
- main character looked like.
- 8. Using facts you read in the story, describe the setting.
- **Comprehension**
- 1. In your own words, tell what the story is about.
- 2. How did the main character feel at the beginning of the
- story?
- 3. How did the main character feel at the end of the story?
- 4. Think of a main event in the story. Why did it happen?
- 5. Explain why the story has the title that it does.
- 6. Draw a picture of a main event in the story.
- 7. If there is a picture in the story, write what happened
- BEFORE the picture and write what happened AFTER
- the picture.
- **Application**
- 1. Think of a situation that occurred to a person in your
- story and decide whether you would have done the
- same thing as he did or something different. Write what
- you might have done.
- 2. Give some examples of people who have had the same
- problems or have done the same kind of thing as the
- person in your story.
- 3. Select any of the people in the story and think of some
- things each would do if he came to your school during
- reading.
- 4. What would you do if you could go to the place where
- the main character lives?
- 5. What would the main character do if he came to your
- house to visit?
- 6. If you had to cook a meal for the characters in the story,
- what would you cook?
- 7. If you met the main character in the story on the street,
- what would you talk about?

Analysis
1. What part of the story was the funniest? Or the most
exciting? Or the saddest?
2. Tell what things happened in the story that *couldn't*
have happened in real life?
3. Some things in the story were true, and some were only
the opinions of someone. List the things that were true.
4. Organize the story into parts and think of a good title for each of the
parts.
5. What could you do that was just like what the person in
the story did?
6. Find 5 words in the story that begin with the same sound.
7. Name 2 things in the story that happened outside (or inside).
8. List at least 5 compound words from the story.

Synthesis
1. Rewrite the story from an animal's point of view.
2. Use your imagination to draw a picture about the story.
Then, add one new thing of your own that was not in the story.
3. Make a poster, a mobile, a puppet, or a painting of the
main characters in the story.
4. Write another ending to the story that is different from
the one that the author wrote.
5. Write a poem about the story.
6. Pretend you are the main character. Write a diary
about what you were doing each day.
7. Rewrite the story **briefly**, but change someone or
something in it. (For example, substitute a dog for a
wolf in **The Three Little Pigs).**
8. Write 5 new titles for the story that would give a good
idea of what it was about.

Evaluation
1. Was the main character in the story good or bad? Why?
2. Compare any two books you've read and tell which one
you would recommend to your friend/s and why you would.
3. Compare 2 characters in the story. Tell which one you
think is better and why.
4. Which character in the story would you most like to
spend the day with? Why?
5. Was this story worth the time it took to read? Why?
6. If you had the opportunity to go where this story takes
place, would you want to go?

- Our teachers will be focusing on the following words within the context of questioning although others will also be used.

Class	Remember	Understand	Apply	Analyze	Evaluate	Create
R/1	Find	Compare	Choose	Identify	Decide	Imagine
1/2	Match	Discuss	Practice	Explain	Rate	Invent
3/4	Describe	Predict	Illustrate	Examine	Recommend	Design
4/5	Relate	Restate	Solve	Compare/Contrast	Justify	Construct