NECT

GRADE 1 - 3

SUBJECT: MATHEMATICS

TERMS 1&2 2019

TRAINER'S GUIDE

CONTENTS

Workshop Objectives

By the end of this training session, participants will:

1. Be aware of the programme for this training session
2. Be informed of the NECT Programme 1 updates
3. Have improved Term 1&2 pedagogical content knowledge.
4. Be fully oriented to the Trainer's Guide that will be used to train teachers on this programme
5. Be motivated to improve their personal facilitation skills
6. Be motivated to improve teaching and learning in their district

Before the Training

1. Be prepared to model excellence in training and facilitation.
2. Prepare the venue as best as possible, to ensure that participants are comfortable, that they can all see the presenter, and that the setup is conducive for discussion.
3. Be prepared to show the slide show and videos. Deal with technical issues before the training.
4. Be fully prepared, have all of your materials laid out in an orderly fashion.
5. Display the objectives of the workshop and go through these with participants.
6. Display an 'agenda' – a chart listing every activity that will be completed, together with the planned time allocation.
7. At the end of every training day, reflect on the objectives and agenda, and tick off what has been achieved that day.
8. DISPLAY ALL RELEVANT RESOURCE THAT HAVE BEEN PRODUCED BY THE NECT FOR CLASSROOMS, I.E.: POSTERS; RESOURCE PACK ITEMS; ETC. (Make an effort to properly prepare these items to present them in a way that models good practice and will protect resources from wear and tear.)

Tone of the Training

1. Remember that you are training TRAINERS and TEACHERS. Please ensure that you address participants correctly.
2. Be polite, patient and RESPECTFUL at all times. This is possibly the most important aspect of being a trainer.
    - Participants will generally be open to you and to the programme if they are treated with respect.
    - Arrive early and be prepared – for every session!
    - Greet participants by name whenever possible and ensure that names are pronounced correctly.
    - Do not be dismissive of a participant's concern. If you do not have time, or if you know that the issue will be addressed later in the session, create a PARKING LOT. Write down the query and stick it in the parking lot to be addressed later.
    - Do not be dismissive of participants' knowledge, skills and experience. As much as possible, allow participants to contribute to discussions.
3. Remember that humour is always a good strategy – try to add some fun to the training, in a way that does not make anyone uncomfortable.
4. Please remember to use icebreakers and energisers when required – it is important to keep the mood and energy of the training positive.

NECT

GRADES 1 - 3 MATHEMATICS

TERMS 1&2 2019 TRAINING PROGRAMME

	TIME	ACTIVITY	TRAINER WORKSHOP	TEACHER WORKSHOP
1	30 minutes	Welcome, housekeeping and updates		
2	30 minutes	Pre-training Activity		
3	30 minutes	Reflections		
4	1 hour	Orientation to the lesson plan structure and topics for Term 1&2		
5	2 hours	Topic: Building of pure number sense		
6	1 hour 30 minutes	Lesson distribution and preparation		
7	3 hours	Lesson demonstrations and feedback		
8	1 hour	Orientation to the trainer's guide		
9	30 minutes	Post Test		
10	30 minutes	Closure and evaluation		

What you will need for this training:

ITEM	QUANTITY	CHECK
Flipchart stand and paper	1	
Kokis	10	
Blank A4 paper	100	
Laptop, data-projector and speakers	1	
USB with all materials	1	
Attendance register	1	
Prestik	5	
Evaluation Forms	1 per participant	
Packet of beans	2 per group	
Unifix cubes	1 set per participant	
Glue	5 per group	
Crayons	5 sets per group	
Training handout	1 per participant	
Hundred charts	1 per group	
Tracker	1 per participant	
Changing cards – in handout	1 set per group	
Mix and Match cards – in handout	1 set per group	
Number puzzle – in handout	1 set per group	
Number cards – in handout	1 set per group	
Lesson Plans	1 per participant	
Coloured paper	1 set per group	
Flipchart paper	1 per trainer	
Trainers guide	1 per participant	
Pre-test	1 per participant	
Post test	1 per participant	

TRAINING ACTIVITIES

1	30 minutes	WELCOME, HOUSEKEEPING AND GROUND RULES	Facilitator:	What you will need: • Ensure that there is a sign outside your training room

1. Settle participants so that you have their attention.
2. Start the day with a short message or prayer if appropriate.
3. Share the relevant housekeeping notes, to ensure that participants are clear about the toilet and catering arrangements.
4. Officially **welcome participants** to the group, and **introduce yourselves**.
5. Go around the room and ask participants to briefly introduce themselves. Be friendly, and thank them for their attendance.
6. Set **ground rules** for the group.
7. You may want to use the analogy of a home.
8. Ensure that ground rules are accepted by all – adjust or remove ground rules that participants do not agree to.
9. Next, explain that there must be **consequences for broken rule**s.
    a) Ask each participant to quickly think of a fun consequence for members of this group, should they not follow a ground rule.
    b) Give participants 3 minutes to write the consequence on a piece of paper, and fold it up.
    c) Collect these papers in some kind of container.
    d) Explain that if someone does not follow the ground rules, they will 'pick their own punishment', by taking a paper from the container!
10. Point out your **Classroom Management Board**.
11. Write 'Pick your own punishment' on the board.
12. Explain that throughout the workshop, we will model or discuss different classroom management strategies.
13. As we do this, we will write them on this board.

2	30 minutes	PRE-TRAINING ACTIVITY	Facilitator: MQA	What you will need: • Copies of pre-test

1. Work together to hand out copies of the pre-training activity to participants.
2. Ask participants to not look at the activity yet.
3. Briefly explain the purpose of the pre-training activity, which is to measure the success of the training, not to measure the scores of individuals.
4. Briefly explain the text conditions, i.e.: to work independently and in silence, for a period of 30 minutes. Ask participants who finish before time to please cover their work and wait quietly for others.
5. As participants complete the pre-training activity, walk around and offer practical assistance if needed.
6. Once time is up, help to collect and collate pre-training activities in an orderly fashion.

3	30 minutes	REFLECTIONS	Facilitator:	What you will need: • Flipchart papers • Marker pen • Prepared chart of agenda / programme • Blank A4 papers

INTRODUCTION

1. Settle participants so that you have their attention.
2. If there are any new members of the group, or if you are new to the group, briefly do a round of introductions.

REFLECTION

1. Next, tell participants that you would like to take some time to get them to reflect on their own experience of the implementation of the training and programme.

ACTIVITY

1. Make sure each participant has a piece of A4 paper.
2. Ask participants to fold the paper into 4.
3. Next, ask them to do the following:
   a. **In the first square**, **they must write:** their name, position, school or district.
   b. **In the second square**, **they must write:** one thing about the programme that is being successfully implemented in schools. Ask them to please write some details about this, even a short narrative to explain what is happening.
   c. **In the third square**, **they must write:** Something that is still problematic, that the programme has not managed to address. Ask them to write some detail about this, even a short narrative to explain what is happening.
   d. **In the fourth square, they must write:** Anything further that they still want from the NECT. Please point out that this cannot be resources.
4. Draw this diagram on flipchart paper to help participants remember what to do:

Name **Position** **School or District**	**One thing that is working well in schools:**
One thing that is still a problem in schools:	**One thing I think the NECT could do for my subject:**

CLOSURE

5. After about 15 minutes, call participants to attention.
6. Ask if anyone would like to share ONE point that they have written down. Listen to as many participants as possible.
7. Thank participants for their input, and assure them that you will pass their comments along.
8. Collect all these sheets – you must collate this information for your report.
9. Go through the agenda for this training with participants. If any of their previous needs are being addressed, please point this out.

4	1 hour	ORIENTATION TO THE LESSON PLAN STRUCTURE AND TOPICS FOR TERM 1 & 2	Facilitator:	What you will need: • Training Handout

1. Settle participants so that you have their attention.
2. Explain that you are now going to explain the structure of the lesson plans and look through the topics for Terms 1 and 2.
3. Tell participants that you have grouped the topics together and that all the topics need to be completed by the end of term 1 or 2.
4. Work through the contents page and the structure of any lesson in the lesson plan.

Structure of the lesson plan

Introduction

1. Ask participants to please turn to page 6 in the Lesson Plan booklet, point out where the lesson will start (point 1).
   - **Mental maths – 15 minutes**

     Revise that mental maths is done daily at the beginning of every lesson and is broken up into 2 parts.
     - Counting – 5 minutes
     - Recall and strategies – 10 minutes
   - **Homework corrections – 15 minutes**

     This is where reflection and remediation based on the previous days homework takes place. Point out that teachers do not need to mark every learner's homework daily, but that peer-marking or self-marking may be used. Teachers must check that homework has been completed and marked.
   - **Lesson content – concept development – 30 minutes**

     This is the body of the lesson where the teacher will teach the concept with examples and explanations that are given in the Lesson Plan booklet. The teacher will introduce the learners to the work planned for the day as whole class teaching. There are 2 or 3 activities in this section.
   - **Classwork activity – 25 minutes**

     Teachers must go through the activities orally with the learners before allowing them to complete the activities independently.

     These activities are done in their learner workbooks or the DBE workbooks.

     These activities can be done individually, in pairs or in groups.

     Allow time at the end of each lesson for the learners to mark and correct their work by providing them with the answers.

- **Homework activity – 5 minutes**

  Teacher must allocate 5 minutes at the end of the lesson to explain the homework that needs to be completed for that afternoon.

- **Friday**

  There are no formal lessons in the Lesson Plans for Friday lessons.

  Teachers must use this time to:

    - complete any work from the week
    - consolidate work from the week
    - complete any assessments that have been set out in the Lesson Plan booklet

  Remind teachers that the assessment worksheets are at the back of the Lesson Plan booklet and the rubrics are in the Planner and Tracker.

- **Give participants a few minutes to browse through the lesson plan and tracker on their own.**

Topics

- Ask participants to turn to the section in the training handout titled: TERM 1 TOPICS.
- Go through the topics for the term for each grade.

TERM 1 GRADE 1

1. Zero and one
2. The number 2
3. The number 3
4. Compare and order numbers 1 to 3
5. The number 4
6. The number 5
7. Numbers 1 to 5
8. Addition up to 4
9. Addition up to 5
10. Counting on – add up to 5
11. Breaking down and building up numbers to 5
12. Addition doubles – 1 to 5
13. Addition up to 5
14. Subtraction up to 4
15. Subtraction up to 5

16. Counting back – subtract up to 5
17. Add and subtract – number bonds and family facts
18. Numbers 6 to 10 – recognition
19. Number patterns to 10
20. Numbers 11 to 15 – recognition
21. Patterns of 10
22. Numbers 16 to 20 – recognition
23. Number patterns to 1 to 15
24. 3-D – balls and boxes
25. Size of 3-D objects
26. 3-D – building objects
27. Length
28. Geometric patterns
29. Data – sort objects
30. Mass
31. Mass – heavy and light
32. Capacity
33. Position
34. Position – follow directions
35. Grouping
36. Sharing
37. Passing time
38. Telling time

TERM 1 GRADE 2

1. Numbers up to 20
2. Numbers 11 to 20
3. Numbers 1 to 20 (place value)
4. Numbers 1 to 25 (place value)
5. Numbers 20 to 25 (place value)
6. Length
7. Counting on and back: addition and subtraction
8. Number bonds and family facts to 20
9. Building up and breaking down numbers

10. Addition doubles: 1 to 20
11. Near doubles
12. Mass – starting to understand kilograms
13. Building through 10 and working in tens
14. Tens and counting in tens
15. Tens arrays
16. Tens sharing and grouping
17. Number patterns: 10
18. Patterns of 10
19. Geometric patterns
20. Geometric patterns
21. Data
22. 3-D objects
23. Building with 3-D objects
24. Fives and counting in fives
25. Fives arrays
26. Fives sharing and grouping
27. Number patters: 5
28. Patterns of five
29. Money
30. Twos and counting in twos
31. Twos arrays
32. Twos sharing and grouping
33. Number patterns: twos
34. Patterns of two
35. Time
36. Time – Calendars

TERM 1 GRADE 3

1. Numbers 0 to 99
2. Place value up to 99
3. Compare and order numbers up to 99
4. Numbers between 100 and 200
5. Numbers 200 to 300

6. Numbers 300 to 400
7. Numbers 400 to 500
8. Addition on a number line
9. Subtraction on a number line
10. Addition and subtraction
11. Money
12. Fives and repeated addition
13. Fives arrays
14. Fives – sharing and grouping
15. Twos and repeated addition
16. Twos arrays
17. Twos – sharing and grouping
18. 2-D shapes
19. 2-D shapes: straight or round edges
20. Data – tally tables
21. Data – bar graphs and tables
22. Data – tallies and tables
23. Threes and repeated addition
24. Threes arrays
25. Threes – sharing and grouping
26. Fours and repeated addition
27. Fours arrays
28. Fours – sharing and grouping
29. Sharing leading to fractions
30. Fractions as parts of a group
31. Fraction shapes
32. Capacity/volume
33. Time – calendars
34. Analogue time
35. Time passed
36. Geometric patterns
37. Number patterns in fives
38. Number patterns in threes
39. Number patterns in fours

Topics

- Ask participants to turn to the section in the training handout titled: TERM 2 TOPICS.
- Go through the topics for the term for each grade.

TERM 2 GRADE 1

1. Number 6
2. Number 7
3. Number 8
4. Number 9
5. Number 10
6. Understand numbers 1–10
7. Numbers 1–10
8. Conservation of numbers
9. Recognise numbers 11–19
10. Recognise numbers 20–29
11. Recognise numbers 30–39
12. Recognise numbers 40–50
13. Capacity and volume
14. Addition up to 10 – counting on
15. Addition – building up numbers up to 10
16. Addition and subtraction – building up and breaking down numbers up to 10
17. Doubling and halving
18. Addition and subtraction problems
19. Geometric patterns
20. 2s patterns to 20
21. 5s patterns to 20
22. 10s patterns
23. 10s patterns using a number board
24. Collecting and organising data
25. Groups of two up to ten
26. 2s – repeated addition up to 10
27. Groups of 3 up to 10
28. 3s – repeated addition up to 10
29. Groups of 4 up to 10

30. 4s – repeated addition up to 10
31. Groups of five up to 10
32. 5s – repeated addition up to 10
33. Money
34. 2-D shapes

TERM 2 GRADE 2

1. Numbers 21–30
2. Numbers 21–30
3. Numbers 31–40
4. Numbers 31–40
5. Numbers 41–50
6. Family facts 0–50
7. Addition – doubles and near doubles up to 50
8. Addition – building and breaking down numbers 1–50
9. Addition using breaking down
10. Subtraction using breaking down
11. Money
12. Money problems
13. Counting in 10s
14. Fives up to 30 – sharing
15. Grouping and sharing – twos up to 30
16. Number patterns – twos up to 150
17. Directions
18. Position and orientation
19. Threes – multiplication
20. Number patterns – threes
21. Fours – multiplication
22. Number patterns – fours
23. Multiplication and division as inverse operations
24. Multiplication and division as inverse operations
25. 2-D shapes
26. Geometric patterns
27. Data

28. Symmetry
29. Fractions
30. Fraction problems
31. Time

TERM 2 GRADE 3

1. Place value: numbers 100–300
2. Place value: numbers 301–400
3. Place value: numbers 401–500
4. Ordinal numbers 200–300
5. Ordinal numbers 300–500
6. Problem solving strategies: building up and breaking down
7. Problem solving strategies: adding 3-digit numbers by breaking down the second number
8. Problem solving strategies: number lines
9. Working with tens – rounding off
10. Fives – number patterns
11. Fives – multiplication and division
12. Twos – number patterns
13. Twos – multiplication and division
14. Threes – number patterns
15. Threes – multiplication and division
16. Fours – number patterns
17. Fours – multiplication and division
18. Geometric patterns
19. Sharing leading to fractions
20. Fractions
21. Data
22. Money – value of money
23. Money – buying and selling problems
24. 3-D objects
25. 3-D objects: construction
26. Directions
27. Position and views
28. Symmetry

29. Length
30. Time
31. Time and calendars
32. Mass
33. 50s – patterns and problems
34. 100s – patterns and problems

- **Next, talk to the person sitting next to you and reflect on the topics as follows:**
  a) Which topics run across all three grades?
  b) If a topic runs across all three grades, what should teachers take note of? (What is required of the topic in the grade before and the grade after, so that teaching is not duplicated; the correct starting point for the topic; a progressive approach to teaching the concepts in the topic is advised.)
  c) Which topics are you uncertain of? (Take note of this and try to ensure that some attention is given to these topics, even if it means changing the teacher lesson demonstrations later in this training.)

5	2 hours	TOPIC: **BUILDING NUMBER SENSE**	Facilitator:	**What you will need:** • Number cards • Number chart poster • Number puzzles • Beans • Unifix cubes • Mix and match cards • Glue • Crayons • Changing cards • Training handout

1. Be well organised for this activity!
2. Settle participants so that you have their attention.
3. Explain that you are now going to engage with one topic in detail.
4. Tell participants that you have selected number sense for grade 1, 2 and 3 for your engagement.
5. Next, explain that before looking at the lesson plans, you will work through the concepts related to Number Sense that must be understood in order for learners to understand all other concepts in Maths.
6. **We will start with a very simple concept development of number sense.**
7. **We will then concentrate on why number sense is so important.**
8. **Lastly, we will solve problems.**

<u>Concept Development of Number Sense</u>

1. Ask participants to turn to the section of their handout: WHAT IS NUMBER SENSE?
2. Say:

   Numbers are everywhere; but they are abstract ideas. One book, one car and one toy have the same number 'one' but they are all different things. It takes a lot of repetition before your child really understands that numbers tell us about 'how many' not about the actual object itself.

   Number sense is at the heart of the concept of numbers or understanding numbers. This skill is vitally important for your child to master in order to excel in Math.

   Without it, numbers are meaningless and impossible to understand.

   Number Sense is your sense of what numbers mean. What value does a number represent? Which number is bigger or smaller? Making comparisons is also part of this sense. Gersten and Chard say number sense "refers to a child's fluidity and flexibility with numbers, the sense of what numbers mean and an ability to perform mental mathematics and to look at the world and make comparisons."

Learners that struggle with maths typically don't have a good sense of number sense. This is one of the foundational concepts that holds them back from becoming fluid in math. You might think of number sense concepts in terms of the importance phonemic awareness plays in reading. Number sense plays that same role in math.

In the past, teachers have concentrated on math facts and how to do calculations. Now, after years of research, they have found that the reason students struggle with learning math is because they don't have the underlying foundation of what numbers actually mean: number sense. If you don't have that basic foundational skill, the new way of teaching math will still be difficult. We need to spend more time on mastering number sense.

Why is number sense so important?

Number sense is needed for learners to understand and complete all aspects of Number, Operations and relationships in the CAPS document and the NECT Maths lesson plans

IDEA

Use a number chart as a classroom management tool!

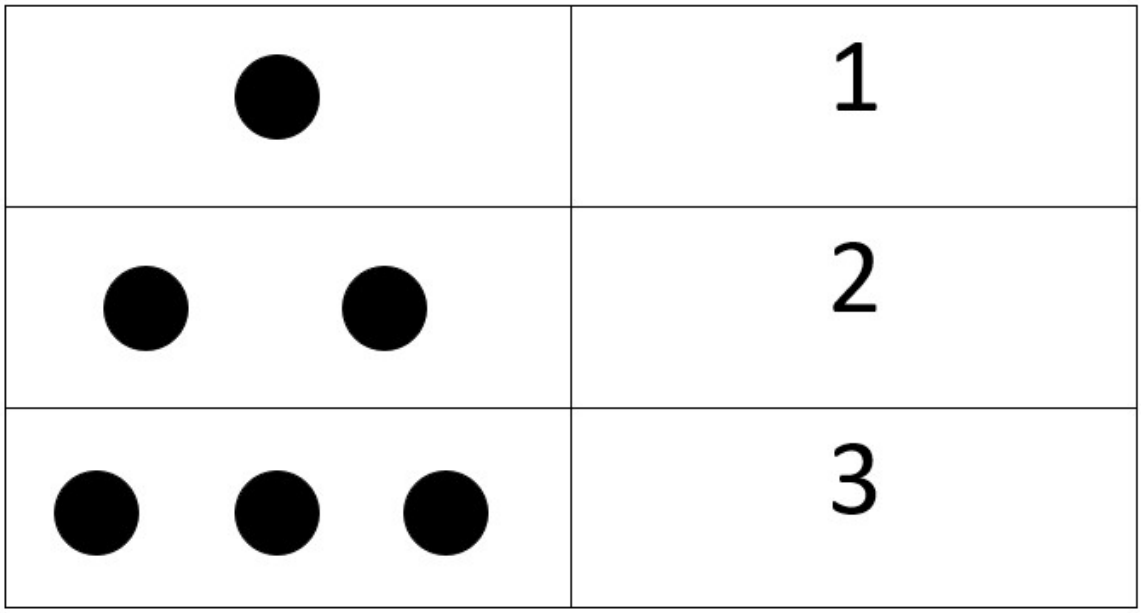
Make a poster-sized 100 number chart and hang it on the wall. Print out number cards (1 - 100) and put them in a bucket. When participants have met a goal you set for them, pick a participant to go pick a number out of the bucket. They then colour it in on the number chart. Be sure to use a light coloured crayon so they can still see the number easily. When they get an entire row or column coloured in, they get a secret prize!

GRADE 1

ACTIVITY 1 - NUMBER PUZZLE 1

1. Put participants into groups of 2
2. Give each group a set of 1 – 20 puzzle pieces.
3. Say:
    a. You have all got some pieces of a puzzle that have dots and other pieces that have number symbols.
    b. Tell participants that they need to work together to match the cards with the dots with the number symbol cards.
    c. The first team that completes the challenge can choose a number out of the bucket.

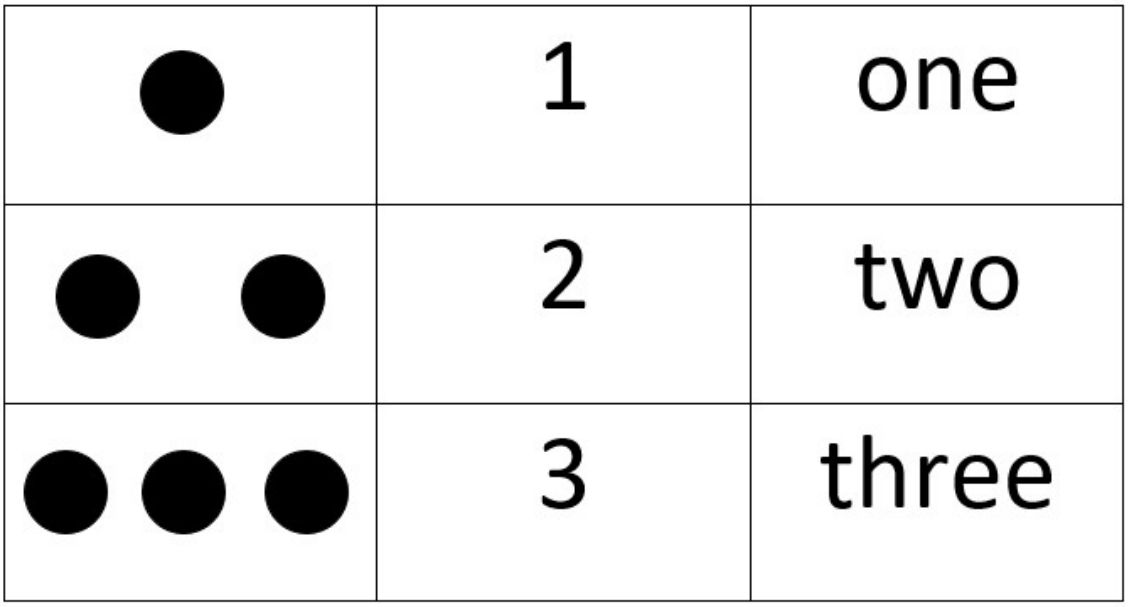
E.G.



ACTIVITY 2 – NUMBER PUZZLE 2

1. Give each group a set of 1 – 5 puzzle pieces.
2. Next say:
3. You have all got some pieces of a puzzle that have dots, other pieces that have number symbols and other pieces that have number names up to the number five.
4. Tell participants that they need to work together to match the cards with the dots with the number symbol cards and the number name cards.
5. The first team that completes the challenge can choose a number out of the bucket.

E.G.



ACTIVITY 3 – I ESTIMATE, I COUNT

1. Give each group a packet of 20 beans
2. Instruct participants to take turns. Each person must take a handful of bean.
3. First they must estimate how many beans they have in their hand.
4. They will write their estimation down on the worksheet in the training handout.
5. Next they will count the beans and write the actual number of bean on the worksheet in the training handout.

E.G.

I Estimate	I count

ACTIVITY 4 – BUILD A TOWER

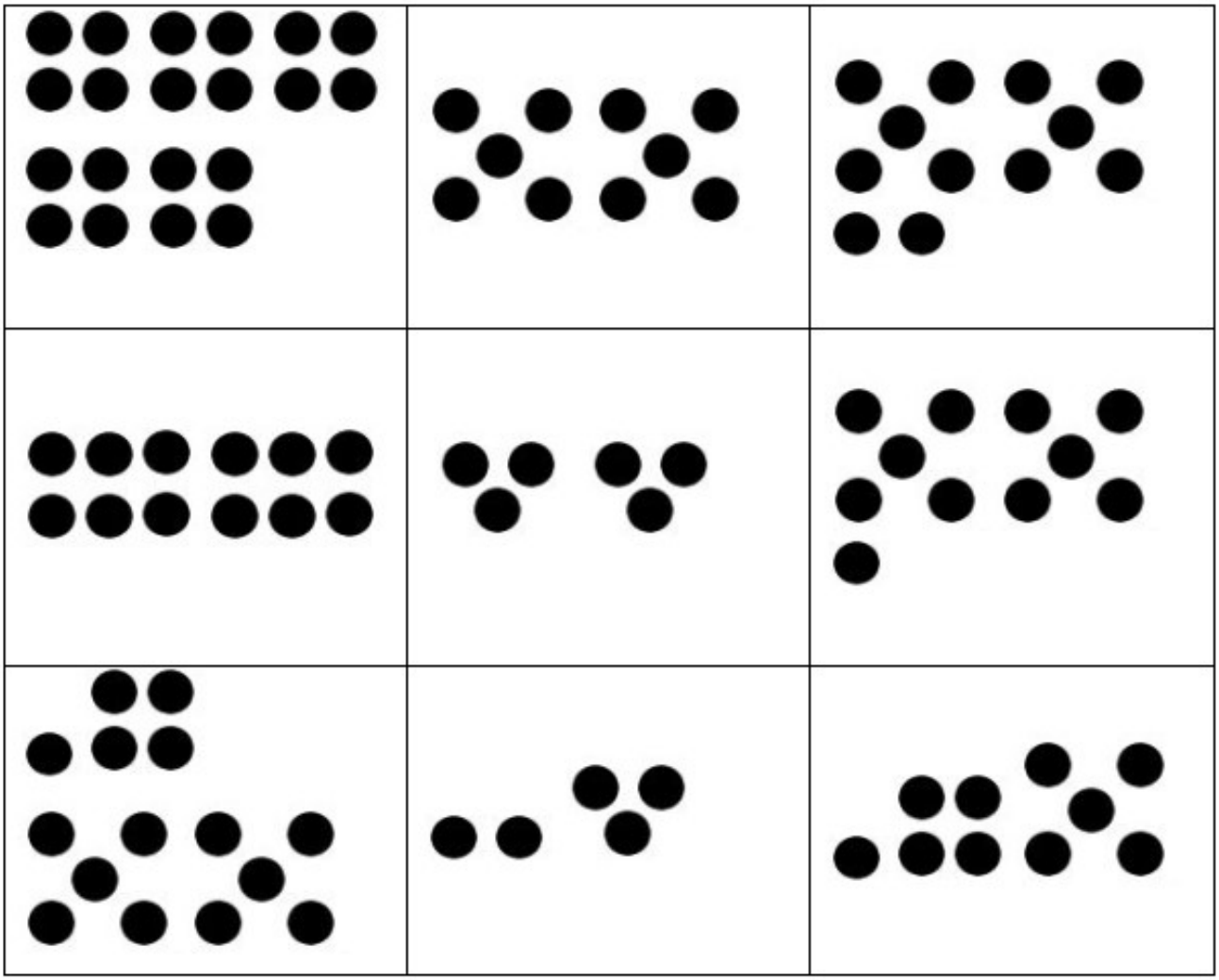
1. Give each group a pack of unifix cubes and a pack of 1 -5 number cards.
2. Each participant must take turns choosing a card.
3. The first person will choose a card.
4. They will read the number symbol and build a tower with that number of unifix cubes.
5. They will put the number back.
6. They next person will choose a card.
7. They will read the number symbol and they make that number by linking the cubes together first and then try to connect their new stack to their existing, standing stack and not have it fall over.
8. The group that manages to make the tallest tower that does not fall over can choose a number out of the bucket.

GRADE 2

ACTIVITY 1 – CATCH AND COLOUR BINGO

1. Put participants into groups of 2
2. Give each group 25 beans.
3. They will find a bingo card in the training handout.
4. Participants must take turns to take a handful of beans and count them.
5. If they have that number represented on their card they may colour it in.
6. Once they have a row (in any direction) they may shout BINGO!
7. The first team that completes the challenge can choose a number out of the bucket.

E.G



ACTIVITY 2 – MIX AND MATCH

1. Put participants into groups of two or three.
2. Tell participants to find the 'Mix and Match' number cards in the training handout.
3. Give each group a selection of different 'Mix and Match' number symbols, number names, number circles, number tallies and number pictures.
4. Participants must choose one number symbol card and use that number to complete the Mix and Match number card in the handout.
5. Participants must work together to complete building the 'Mix and Match' cards.
6. The first team that completes the challenge can choose a number out of the bucket.

Mix and Match Card

Number Symbol	
Number Name	**Number Circles**
Tally	**Pictures**

Mix and Match number cards

E.G.

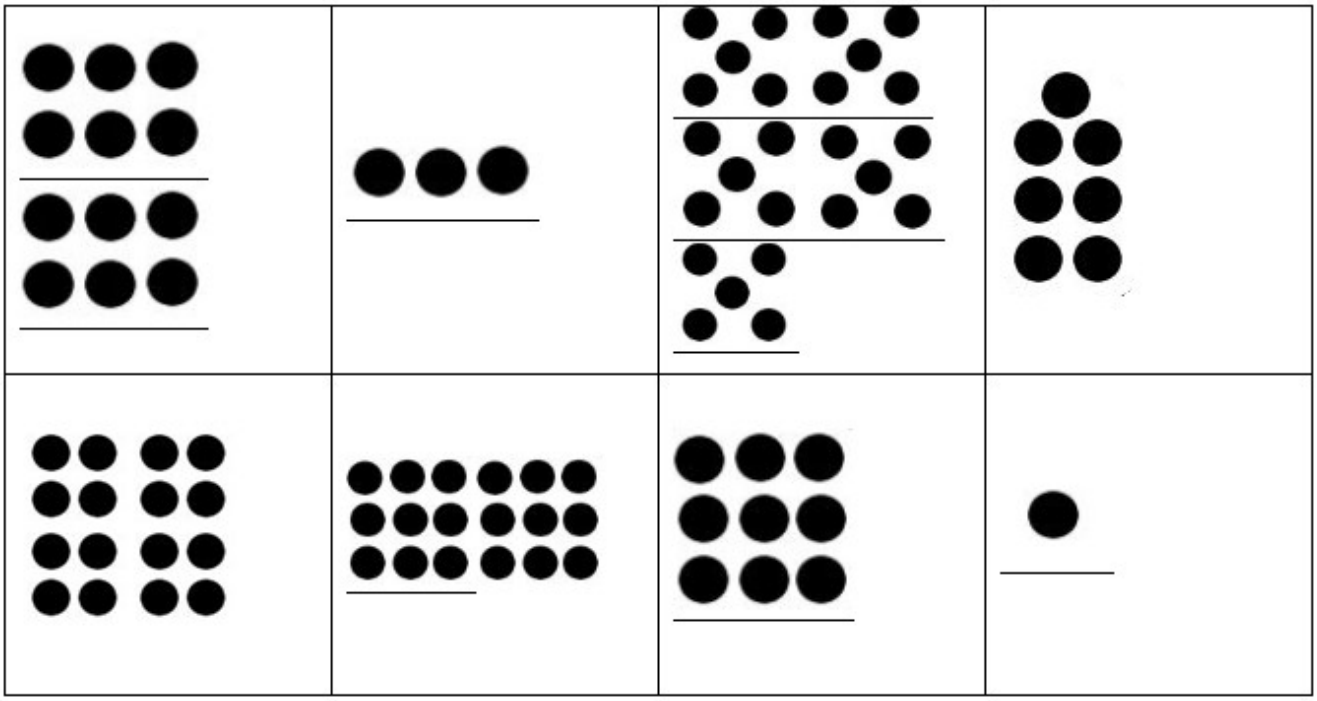
Number Symbols

12	3	25	7
16	18	9	1

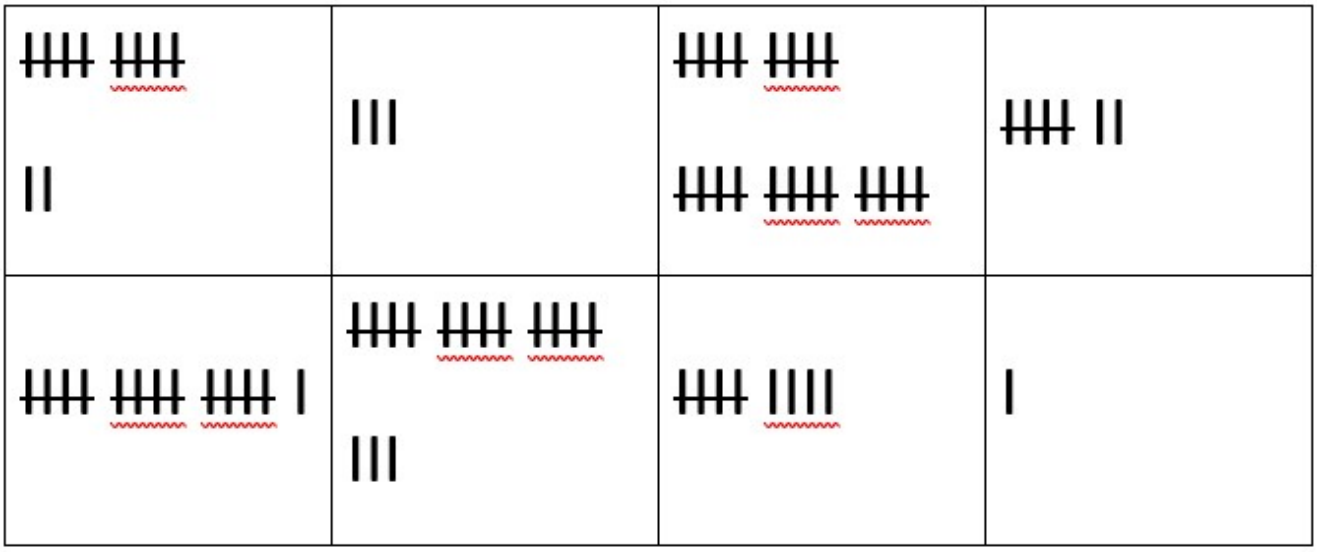
Number Names

Twelve	Three	Twenty Five	Seven
Sixteen	Eighteen	Nine	One

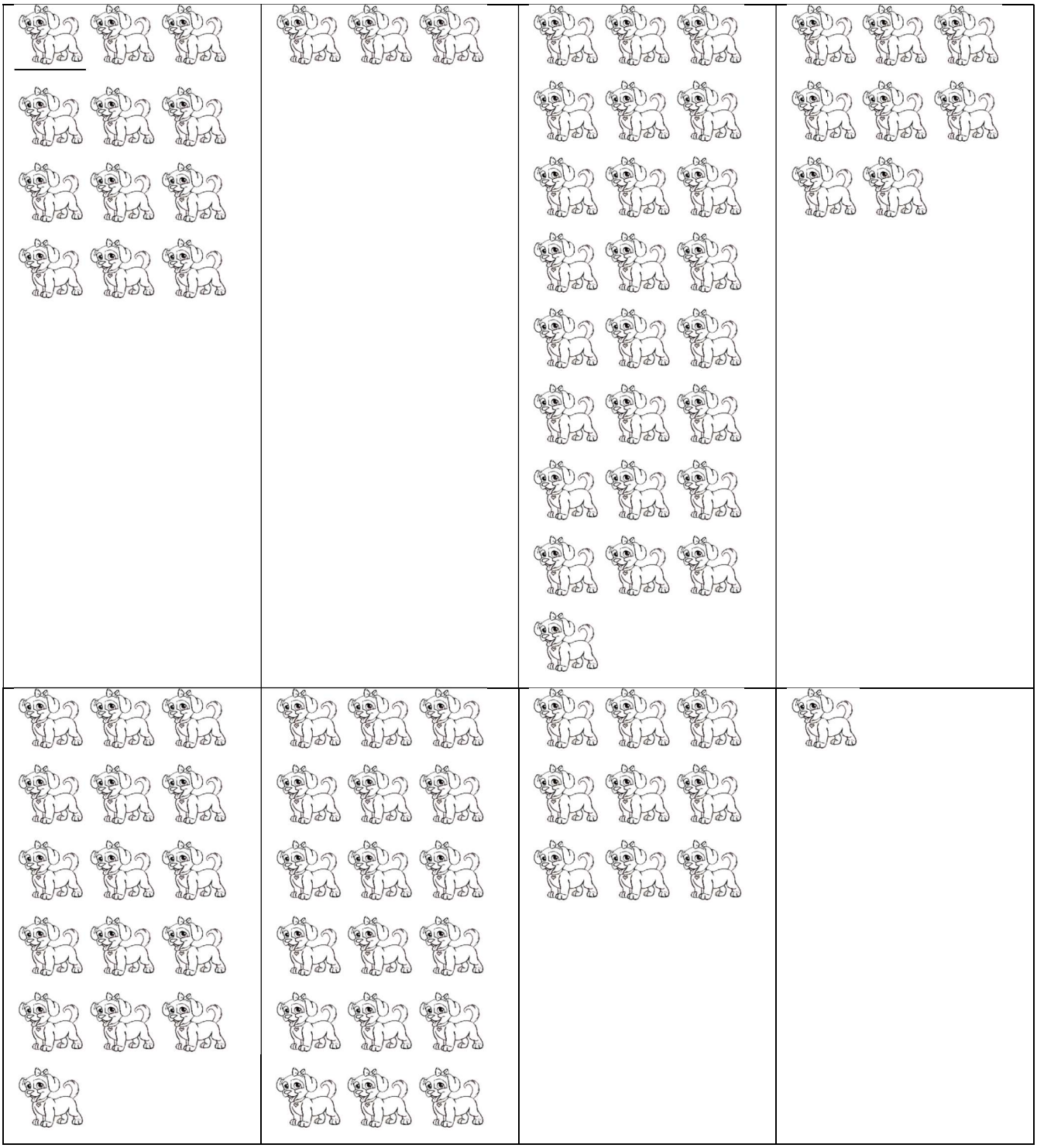
Number Circles



Number Tally



Number Pictures



Completed Mix and Match Number card

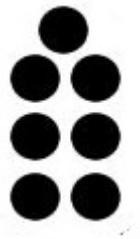
Number Symbol

7

Number Name

Seven

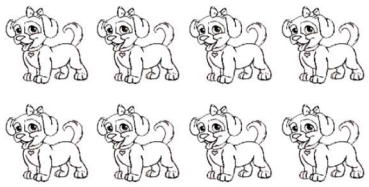
Number Circles



Tally

𝍸 II

Pictures



ACTIVITY 3 – GUESS MY NUMBER

1. Put participants into groups of two
2. Give each group a set of number cards (1-100)
3. One participant selects a number from the set of number cards.
4. The other players ask questions to identify the number. For example
    a. Is it more than 50?
    b. Is it an even number?
    c. Is it between 10 and 20?
    d. Does it divide by 5 evenly?
5. Who can find the number using the least number of questions?
6. Avoid asking about specific numbers, for example “is it 27?”, or “is it 36?” until it is obvious that it is correct.
7. If a number is guessed correctly the participant can choose a number out of the bucket.

GRADE 3

ACTIVITY 1 – THE HIDING GAME

1. Put participants into groups of two
2. Give each group 20 beans.
3. One participant must close their eyes.
4. The other participant must ‘hide’ some of the beans.
5. When the other participant opens their eyes they need to look at the remaining beans and work out how many beans their partner ‘hid’.
6. They will then swop turns.

ACTIVITY 2 – WHAT’S THE FINAL NUMBER?

1. Put participants into groups of three.
2. Give each group a set of number cards. (400 – 500)
3. Give each group a set of ‘changing’ cards.
4. Participants will find the recording sheet in the training handout.
5. Participants must take turns in selecting a number card and a ‘changing’ card.
6. They must then complete the recording sheet.
7. The first team that completes the challenge can choose a number out of the bucket.

CHANGING CARDS

+ 30	**+50**	**-10**	**-20**
+ 100	**+ 70**	**- 50**	**- 40**
+80	**+200**	**- 90**	**- 100**

RECORDING SHEET

Starting number	Changes	Ending number
162	+200	362

ACTIVITY 3 – NUMBER OF THE DAY

1. Put participants into groups of four.
2. Participants will find the 'Number of the Day' sheet in the training handout.
3. Groups must work together to record as many different ways to represent the 'Number of the Day' as possible.
4. The group with the most ways to represent the number of the day can choose a number out of the bucket.

NUMBER OF THE DAY

E.G.

Number of the Day 147			
100+40+7	140+7	50+50+47	130+17

Moving from concrete to representational to abstract

1. Ask the participants to reflect on the progression of teaching as follows:
2. Did you notice that we only started the writing activities right at the end?
3. We started with real objects (concrete) then moved onto pictures (representational) and then we moved to the writing (abstract).
4. Why do you think we did this? (Listen to responses)
5. It is very important that we do not miss out any of these steps. Children learn from seeing and interacting more than from writing.

Conclusion

1. Tell participants that we are now finished with our engagement with Number Sense.
2. Ask participants if they now understand the importance of Number Sense. (Listen to responses)
3. Collect all resources and make sure that participants have all their materials.
4. ***Note: This is a good time for an ice-breaker.***

6	1 hour 30 minutes	**LESSON DISTRIBUTION AND PREPARATION**	**Facilitator:**	**What you will need:** • Lesson plans • Flipchart paper • Scrap materials

1. Divide the participants into groups.
2. Give each group a lesson from the lesson plans to plan.
3. Remember to adjust the list of lessons to include any lessons that participants are worried about.
4. Explain to participants that the lessons that they are going to demonstrate mostly relate to the work that we have done in this training.
5. Explain that participants will have to plan the lesson and prepare any resources. They must plan their demonstration to take 10 - 15 minutes and they must only plan the concept development part of the lesson.
6. Distributed lessons for lesson demonstrations for participants to prepare.
    a. Group 1 = Grade 1 Term 1: Lesson 17 Page 66 – 68 (Add and subtract – number bonds and family facts)
    b. Group 2 = Grade 1 Term 2: Lesson 8 Page 30 – 32 (Conservation of numbers)
    c. Group 3 = Grade 2 Term 1: Lesson 4 Page 27 – 29 (Number 1 – 25 – Place value)
    d. Group 4 = Grade 2 Term 2: Lesson 11 Page 39 – 41 (Addition – building and breaking down numbers 1 - 50)
    e. Group 5 = Grade 3 Term 1: Lesson 5 Page 30 - 32 (Numbers 200 - 300)
    f. Group 6 = Grade 3 Term 2: Lesson 3 Page 15 – 17 (Place value – numbers 401 - 500)
7. Give participants the remainder of this time to prepare their lessons.
8. As participants prepare, walk around and offer assistance where necessary.

7	3 hours	LESSON DEMONSTRATIONS AND FEEDBACK	Facilitator:	What you will need: • Flipchart paper • Scrap materials • Lesson plans

1. Settle the participants and explain that they are now going to demonstrate a lesson to the group on the lesson plans for terms 1 and 2 2019.
2. Explain that they will have 10 minutes to give the demonstration with 10 minutes for feedback.
3. These are the lessons.
    a. Group 1 = Grade 1 Term 1: Lesson 17 Page 66 – 68 (Add and subtract – number bonds and family facts)
    b. Group 2 = Grade 1 Term 2: Lesson 8 Page 30 – 32 (Conservation of numbers)
    c. Group 3 = Grade 2 Term 1: Lesson 4 Page 27 – 29 (Number 1 – 25 – Place value)
    d. Group 4 = Grade 2 Term 2: Lesson 11 Page 39 – 41 (Addition – building and breaking down numbers 1 - 50)
    e. Group 5 = Grade 3 Term 1: Lesson 5 Page 30 - 32 (Numbers 200 - 300)
    f. Group 6 = Grade 3 Term 2: Lesson 3 Page 15 – 17 (Place value – numbers 401 - 500)
4. Each group will come to the front and demonstrate the lesson given to them. (put a timer on your phone to keep track of time)
5. After each group has been given 15 minutes the participants will give constructive feedback. (always start with a positive observation and then give constructive comments)
6. Thank each group for their effort.

Use this time to ensure that participants do the following:

1. *Work from the lesson plans – present what is in the lesson plan (do not leave out or add in extra information)*
2. *Clearly explain the concept*
3. *Use the correct language / terminology*
4. *Deal with any relevant reading issues*

Also use this time to clear up any misunderstandings or misconceptions that participants may have. Participants must leave with a clear understanding of how to teach these concepts. If a lesson is demonstrated incorrectly, use this time to re-demonstrate the lesson correctly.

8	1 hour	ORIENTATION TO THE TRAINER'S GUIDE	Facilitator:	What you will need: • Trainers guides • Training handout

Note: If you have any extra time, spend it on this activity, particularly points 4 and 6.

1. Settle participants with all their materials.
2. Give each participant a copy of the **Trainers Guide** and **Training Handout**.
3. Explain to participants that the **Trainers Guide** and **Training Handout** contain all the activities for the Term 1 and 2 training.

3. Planning the training session:

a. Tell participants to look carefully at the programme at the front of the trainer's guide.
b. Go through this programme and tell participants which activities to complete when training other trainers.
c. Go through this programme and tell participants which activities to complete when training teachers.

4. Orientation to the guide and handout:

a. Go through each activity in the trainer's guide and look at the corresponding resources or section in the training handout.
b. Work with participants to summarise the key steps and points of each activity.
c. After you have done this for each activity, revise the order of activities, and the main points for each activity. For example:
    - Start with the **Welcome, housekeeping and ground rules.**
    - You have 30 minutes for this.

5. The point of doing this is try and ensure that trainers clearly understand each activity and internalise as much of the workshop as possible.

6. If time allows, allocate different activities to volunteers, and ask them to present a 'dry-run' presentation of the activity. After each presentation, ask the other participants to give feedback based on the following:

a. Was the activity presented correctly?
b. Did the main points of the activity come across clearly?

c. Did the presenter give clear instructions?

d. Was the presenter audible?

e. Did the presenter interact effectively with participants?

f. Did the presenter manage time effectively?

7. Finally, thank participants for their presentations, and hold a closing discussion:

a. Ask: Which activities are you worried about presenting or facilitating? Why?

b. Try to address any concerns that participants may have.

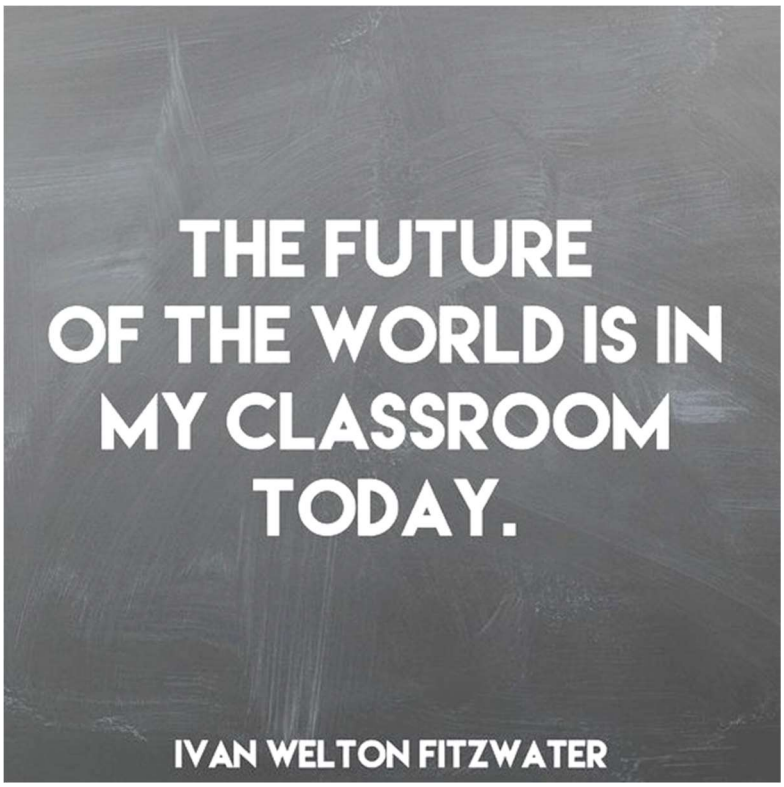
c. Wish participants well for their training.

9	**30 minutes**	**POST TEST**	**Facilitator:**	**What you will need:** • Copies of post test

1. Work together to hand out copies of the post-test to participants.
2. Remind participants that the purpose of these tests is to measure the success of the training, not to measure the scores of individuals.
3. Remind participants of the test conditions and available time.
4. As participants complete the test, walk around and offer practical assistance if needed.
5. Once time is up, help to collect and collate tests in an orderly fashion.

10	30 minutes	CLOSURE AND EVALUATION	Facilitator:	What you will need: Evaluation forms

1. Settle participants so that you have their attention.
2. Give participants an evaluation form, briefly take them through the form, and then ask them to please complete it thoughtfully and carefully.
3. Collect the completed evaluation forms.
4. Call participants to attention and ask them to share one positive thing that they will take away from this training. This can be absolutely anything: new content that they have learned or clarified; a new skill; a better understanding of the curriculum; new enthusiasm for their job; a closer working relationship with a colleague; etc.
5. Document what participants say for your report.
6. Thank the participants for their ongoing commitment to education, and to the development of South Africa.
8. Wish participants well for their own training.



Thank you for your ongoing dedication and commitment to this cause.