असर
ASER
Evidence for Action

Pratham

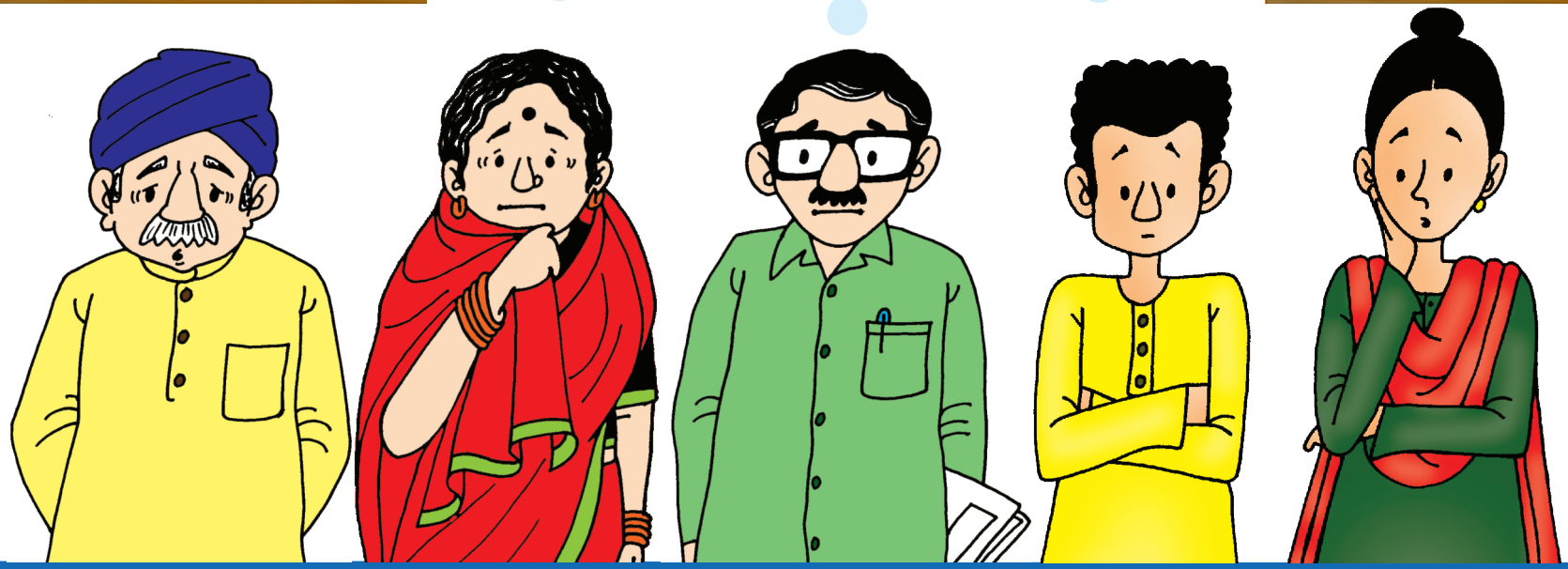
Almost all children in India are enrolled in school. Come let us ensure that they all learn well.

Std II level text

Rani is ten years old. She has a brother. They are getting ready for school. She has taken a bath and combed her hair. Her brother has kept the books in his bag. Their school is far away from the house. Both of them walk to school every day.

Std II level math

$$\begin{array}{r} 51 \\ -\ 35 \\ \hline \\ \hline \\ 84 \\ -\ 49 \\ \hline \\ \hline \end{array}$$



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Contents

Children are going to school but can they read a simple text and do basic arithmetic?

Children are in school

Over 97% of 6-14 year old children in India are enrolled in school.*

Low basic learning levels are an issue...

Figures for India show that about half of Std V children cannot read a simple story and solve a simple subtraction sum.*

Reading and basic arithmetic are fundamental building blocks of learning. Without these children cannot make progress in school.

But are children learning?

Let us help children learn well.

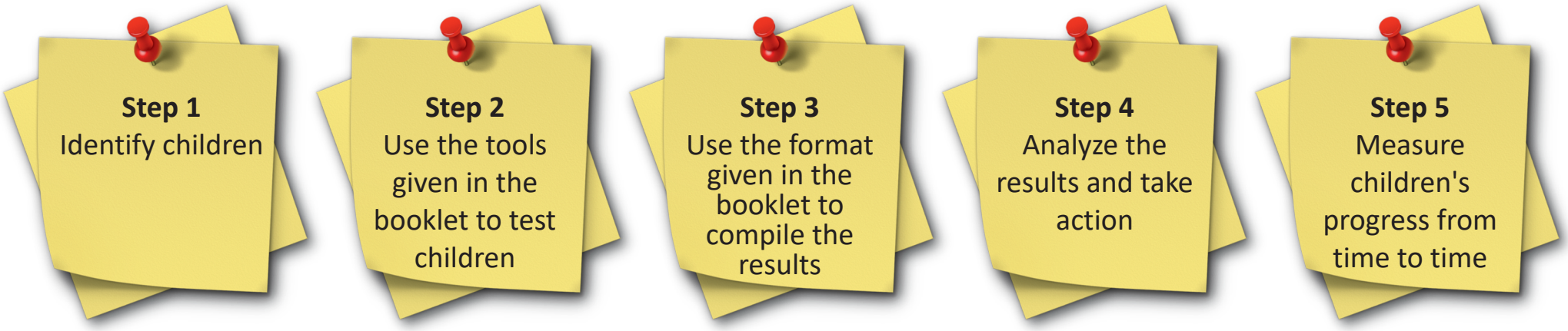
*ASER 2018.

The Annual Status of Education Report (ASER), a nationwide survey to assess the learning levels of children, is conducted every year in all rural districts of India. It generates reliable estimates of children's learning levels in basic reading and arithmetic for all rural districts and states in the country.

Can children read a simple story and do simple subtraction?

This booklet can be used by parents, teachers or anyone who is interested in knowing and improving learning levels of children in basic reading and arithmetic.

Process for testing and analysing results



- **This booklet contains test samples based on tools used in the ASER survey across India. Such tools are available in all major Indian languages. ASER assesses 5-16 year old children using this tool.**
- **The booklet also contains formats for recording learning levels for children in different grades.**
- **These tools and formats can be used to test children in higher grades as well.**
- **Once the School Report Card is made, the results can be used to plan how to improve learning levels of children in basic reading and arithmetic.**

ASER assessment tasks - Reading

The testing process addresses ASER's central question - are children acquiring foundational reading and arithmetic skills? The process is designed to record the highest level that each child can comfortably achieve. That is, rather than testing grade-level competencies, ASER is a 'floor test' focusing on basic learning.

All children in the 5-16 age group are tested using the same tools, irrespective of age, grade, or schooling status. Children are assessed on basic reading, simple arithmetic.

ASER's testing process incorporates various measures to ensure that it captures the best that each child can do. Surveyors are trained to build rapport with children to create a relaxed and encouraging environment. Testing is conducted in the local language of the child. Children are given the time they need to do each task on the assessment. The testing process is adaptive to the child's ability so that she does not have to attempt all levels. Thus, at the core of this test design is the child's comfort and a commitment to accurately record the highest level the child can perform at.

The following pages outline the ASER testing process used to assess each child on basic reading, arithmetic.

All children are assessed using a simple reading tool. The reading test has 4 tasks:

- Letters: Set of commonly used letters.
- Words: Common, familiar words with 2 letters and 1 or 2 matras.
- Std I level text (Paragraph): Set of 4 simple linked sentences, each having no more than 6 words. These words (or their equivalent) are in the Std I textbooks of the states.
- Std II level text (Story): Short story with 7-10 sentences. Sentence construction is straightforward, words are common and the context is familiar to children. These words (or their equivalent) are in the Std II textbooks used in all states.

While developing the reading tool in each regional language, care is taken to ensure:

- Comparability with previous years' tools with respect to word count, sentence count, type of words and conjoint letters in words.
- Compatibility with the vocabulary and sentence construction used in Std I and Std II language textbooks of the states.
- Familiarity of words and context, established through extensive field piloting.

How to test reading?

Start here

Std I level text (Paragraph)

Ask the child to read the paragraph.

Listen carefully to how she reads.

The child is not at 'Paragraph Level' if the child:

- Reads the paragraph like a string of words, rather than sentences.
- Reads the paragraph haltingly and stops very often.
- Reads the paragraph fluently but with more than 3 mistakes.

If the child is not at 'Paragraph Level' then ask the child to read words.

Words

Ask the child to read any 5 words from the list of words. Let the child choose the words herself. If the child does not choose, then point out any 5 words one by one for her to read. The child is at 'Word Level' if the child reads at least4 out of the 5 words correctly.

If the child is at 'Word Level', then ask her to try to read the same paragraph again and then follow the instructions for paragraph level testing.

If she can correctly and comfortably read at least 4 out of 5 words but is still struggling with the paragraph, then mark the child at 'Word Level'.

If the child is not at 'Word Level' (cannot correctly read at least 4 out of the 5 words chosen), then show her the list of letters.

Letters

Ask the child to recognize any 5 letters from the list of letters. Let the child choose the letters herself. If the child does not choose, then point out any 5 letters one by one for her to read. The child is at 'Letter Level' if the child correctly recognizes at least 4 out of 5 letters correctly.

If the child is at 'Letter Level', then ask her to try to read the same words again and then follow the instructions for word level testing. If she can recognize at least 4 out of 5 letters but cannot read words, then mark the child at 'Letter Level'. If the child is not at 'Letter Level' (cannot recognize at least 4 out of 5 letters chosen), then mark the child at 'Beginner Level'.

The child is at 'Paragraph level' if the child:

- Reads the paragraph like she is reading sentences, rather than a string of words.
- Reads the paragraph fluently and with ease, even if she is reading slowly.
- Reads the full paragraph with 3 or less than 3 mistakes.

If the child can read a paragraph, then ask the child to read the story.

Std II level text (Story)

Ask the child to read the story.

The child is at 'Story Level' if the child:

- Reads the story like she is reading sentences, rather than a string of words.
- Reads the story fluently and with ease, even if she is reading slowly.
- Reads the full story with 3 or less than 3 mistakes.

If the child can read the story, then mark the child at 'Story Level'.

If the child is not at 'Story Level', then mark the child at 'Paragraph Level'.

ASER assessment tasks - Arithmetic

All children are assessed using a simple arithmetic tool. The arithmetic test has 4 tasks:

- Number recognition 1 to 9
- Number recognition 11 to 99
- Subtraction: 2-digit numerical subtraction with borrowing.
- Division: 3-digit by 1-digit numerical division with remainder.

While developing the arithmetic tool for the ASER age group, care is taken to ensure compatibility with the learning outcomes defined for number recognition, subtraction (with borrowing), division (3-digits by 1-digit) in state textbooks for Std I, II and III/IV, respectively.

How to test arithmetic?

Start here

Subtraction (2-digits with borrowing)

The child is required to solve 2 subtraction problems. Show the child the subtraction problems. First ask the child to choose a problem. If the child does not choose, pick a problem.

Ask the child what the numbers are, then ask the child to identify the subtraction sign.

If the child is able to identify the numbers and the sign, ask her to write and solve the problem on a rough sheet. Check if the answer is correct.

Even if the first subtraction problem is answered incorrectly, ask the child to solve the second question following the process explained above. If the second problem is correct, ask the child to try and do the first problem again.

If the child makes a careless mistake, then give the child another chance with the same question.

If the child cannot do both subtraction problems correctly, then ask the child to recognize numbers from 11-99.

Even if the child does just one subtraction problem incorrectly, give her the number recognition (11-99) task.

Number Recognition (11-99)

Ask the child to identify any 5 numbers from the list. Let the child choose the numbers herself. If the child does not choose, then point out any 5 numbers one by one for her to read.

If she can correctly recognize at least 4 out of 5 numbers, then mark her at 'Number Recognition (11-99) Level'.

If the child is not at 'Number Recognition (11-99) Level' (cannot correctly recognize at least 4 out of 5 numbers chosen), then ask her to recognize numbers from 1-9.

Number Recognition (1-9)

Ask the child to identify any 5 numbers from the list. Let the child choose the numbers herself. If the child does not choose, then point out any 5 numbers one by one for her to read.

If she can correctly recognize at least 4 out of 5 numbers, then mark her at 'Number Recognition (1-9) Level'.

If the child is not at 'Number Recognition (1-9) Level' (cannot recognize at least 4 out of 5 numbers chosen), then mark her at 'Beginner Level'.

If the child does both the subtraction problems correctly, ask her to do a division problem.

Division (3-digits by 1-digit)

The child is required to solve 1 division problem. Show the child the division problems. She can choose any one problem. If not, then you pick one.

Ask her to write and solve the problem.

Observe what she does. If she is able to correctly solve the problem, then mark the child at 'Division Level'.

Note: The quotient and the remainder both have to be correct.If the child makes a careless mistake, then give the child another chance with the same question.

If the child is unable to solve a division problem correctly, mark the child at 'Subtraction Level'.

SAMPLE-1

Reading Test

Letter

m t z

f k

i a r

v p

Word

both step

cup

out rope

dog

hat key

Std II level text **Story**

A big tree stood in a garden. It was alone and lonely. One day a bird came and sat on it. The bird held a seed in its beak. It dropped the seed near the tree. A small plant grew there. Soon there were many more trees. The big tree was happy.

Std I level text **Para**

There is a big monkey.

He lives on a tree.

He likes to jump.

He also likes bananas.

Ask the child to read this tool. Mark the child at the highest level he/she can reach.

SAMPLE-1

Arithmetic Test

Std III/IV level Division

Number recognition 1–9	Number recognition 11–99	Subtraction	Division
3 7	65 38	51 − 35 ; 67 − 48	7)918
1 4	92 23	84 − 49 ; 73 − 36	6)769
8 9	47 72	56 − 37 ; 31 − 13	8)987
5 2	56 87	45 − 18 ; 43 − 24	4)513
	29 11		

SAMPLE-2

Reading Test

Letter

e w x

a y

n d u

c p

Word

here tall

for

sky are

mind

shop bed

Std II level text **Story**

Rani is ten years old. She has a brother. They are getting ready for school. She has taken a bath and combed her hair. Her brother has kept the books in his bag. Their school is far away from the house. Both of them walk to school every day.

Std I level text **Para**

My village is very big.

It has many houses.

It also has a shop.

The bus stops in my village.

Ask the child to read this tool. Mark the child at the highest level he/she can reach.

SAMPLE-2

Arithmetic Test

Std III/IV level Division

Number recognition 1–9	Number recognition 11–99	Subtraction	Division
2 7	76 58	74 − 56 ; 63 − 34	8) 993 (
3 5	69 99	47 − 29 ; 84 − 35	6) 758 (
9 8	34 61	41 − 15 ; 32 − 15	7) 865 (
4 1	46 84	36 − 18 ; 68 − 49	4) 658 (
	25 68		

SAMPLE-3

Reading Test

Letter

b s y

k m

n r h

t x

Word

ring sun

ball

run fox

clap

foot pan

Std II level text **Story**

I love my village. We go there during holidays. My uncle and aunt live there. My aunt is very nice. She tells me stories and gives me sweets. My uncle is a farmer. He takes me to his farm. There is a pond near the farm. I love to swim in the pond.

Std I level text **Para**

Today is a cloudy day.
There are birds in the sky.
We all are playing.
We are very happy.

Ask the child to read this tool. Mark the child at the highest level he/she can reach.

SAMPLE-3

Arithmetic Test

Std III/IV level Division

Number recognition 1–9	Number recognition 11–99	Subtraction	Division
1 4	52 83	56 − 29 ; 64 − 39	8) 979 (
7 3	37 27	43 − 28 ; 45 − 17	6) 823 (
6 9	55 28	93 − 76 ; 75 − 57	7) 975 (
5 2	91 65	52 − 15 ; 66 − 49	4) 513 (
	36 43		

SAMPLE-4

Reading Test

Letter

e d w

s c

g h z

i q

Word

hand star

bus

cat book

day

few old

Std II level text — Story

Seema is a little girl. Her mother gave her a book. It had lots of stories and nice pictures. Seema reads it every morning on her way to school. She learned many words. Her teacher was very happy. The teacher gave Seema another book. It had more stories. She showed it to all her friends.

Std I level text — Para

I go to school by bus.

The bus has four wheels.

It has many windows.

It is blue in colour.

Ask the child to read this tool. Mark the child at the highest level he/she can reach.

SAMPLE-4

Arithmetic Test

Std III/IV level Division

Number recognition 1–9	Number recognition 11–99	Subtraction	Division
5 7	71 24	63 − 44 ; 41 − 13	7) 898 (
8 4	92 86	92 − 48 ; 71 − 35	4) 659 (
2 9	23 79	45 − 26 ; 34 − 18	8) 946 (
3 1	37 61	43 − 29 ; 46 − 17	6) 757 (
	58 14		

Sample of a Test Compilation Sheet

A sample of a filled compilation sheet is given below. It explains how to record children's information in the sheet. Mark each child at the highest level he/she is able to achieve in reading and arithmetic. Then compile the total in the last row of this format. You can use this format to compile grade-wise results for a school.

Village name: Dogri				School name: Govt. Primary School Dogri									
Std: III	DD/MM/YY of assessment: 03-02-2023			**Reading level** Tick (✓) the highest level					**Arithmetic level** Tick (✓) the highest level				
Sl. No.	Name of Child	Age	Sex (M/F)	Beginner	Letter	Word	Paragraph (Std I level text)	Story (Std II level text)	Beginner	No. Recognition (1-9)	No. Recognition (11-99)	Subtrac-tion	Division
1.	Ramu	6	M		✓					✓			
2.	Shyam	7	M			✓					✓		
3.	Reena	8	F		✓				✓				
4.	Mukesh	8	M				✓					✓	
5.	Mohan	7	M	✓						✓			
6.	Manoj	6	M					✓			✓		
7.	Meena	9	F					✓					✓
8.	Rajesh	6	M				✓					✓	
9.	Rahul	8	M			✓					✓		
10.	Beena	8	F					✓			✓		
Total				**1**	**2**	**2**	**2**	**3**	**1**	**2**	**4**	**2**	**1**

Test Compilation Sheet

Village name:				School Name:										
Std:	DD/MM/YY of assessment:			**Reading level** Tick (✓) the highest level					**Arithmetic level** Tick (✓) the highest level					
Sl. No.	Name of Child	Age	Sex (M/F)	Beginner	Letter	Word	Paragraph (Std I level text)	Story (Std II level text)	Beginner	Number Recognition (1-9)	Number Recognition (11-99)	Subtrac-tion	Division
Total													

Note: The reading and arithmetic test each have 5 levels. Mark the child at the highest level he/she is able to achieve for both categories.

Test Compilation Sheet

Village name:				School Name:										
Std:	DD/MM/YY of assessment:			**Reading level** Tick (✓) the highest level					**Arithmetic level** Tick (✓) the highest level					
Sl. No.	Name of Child	Age	Sex (M/F)	Beginner	Letter	Word	Paragraph (Std I level text)	Story (Std II level text)	Beginner	Number Recognition (1-9)	Number Recognition (11-99)	Subtrac-tion	Division	
Total														

Note: The reading and arithmetic test each have 5 levels. Mark the child at the highest level he/she is able to achieve for both categories.

Test Compilation Sheet

Village name:				School Name:										
Std:	DD/MM/YY of assessment:			**Reading level** Tick (✓) the highest level					**Arithmetic level** Tick (✓) the highest level					
Sl. No.	Name of Child	Age	Sex (M/F)	Beginner	Letter	Word	Paragraph (Std I level text)	Story (Std II level text)	Beginner	Number Recognition (1-9)	Number Recognition (11-99)	Subtrac-tion	Division
Total													

Note: The reading and arithmetic test each have 5 levels. Mark the child at the highest level he/she is able to achieve for both categories.

Test Compilation Sheet

Village name:				School Name:										
Std:	DD/MM/YY of assessment:			**Reading level** Tick (✓) the highest level					**Arithmetic level** Tick (✓) the highest level					
Sl. No.	Name of Child	Age	Sex (M/F)	Beginner	Letter	Word	Paragraph (Std I level text)	Story (Std II level text)	Beginner	Number Recognition (1-9)	Number Recognition (11-99)	Subtrac-tion	Division
Total													

Note: The reading and arithmetic test each have 5 levels. Mark the child at the highest level he/she is able to achieve for both categories.

Test Compilation Sheet

Village name:				School Name:										
Std:	DD/MM/YY of assessment:			**Reading level** Tick (✓) the highest level					**Arithmetic level** Tick (✓) the highest level					
Sl. No.	Name of Child	Age	Sex (M/F)	Beginner	Letter	Word	Paragraph (Std I level text)	Story (Std II level text)	Beginner	Number Recognition (1-9)	Number Recognition (11-99)	Subtrac-tion	Division
Total													

Note: The reading and arithmetic test each have 5 levels. Mark the child at the highest level he/she is able to achieve for both categories.

Sample of a School Report Card

Once you have recorded the results for each grade in the Test Compilation Sheet, you can write the grade-wise total number of children in each level in the School Report Card. In this manner, you can make a report card for more than one school or village.

Village name: Dogri	School name: Govt. Primary School Dogri
Std: __I__ to __V__	DD/MM/YY of report card: 17-02-2023

Reading Level

Std	Total number of tested children	Beginner	Letter	Word	Paragraph (Std I level text)	Story (Std II level text)
Std I	**10**	**4**	**3**	**1**	**1**	**1**
Std II	**10**	**2**	**3**	**2**	**1**	**2**
Std III	**10**	**1**	**2**	**2**	**2**	**3**
Std IV	**10**	**1**	**1**	**2**	**2**	**4**
Std V	**10**	**0**	**1**	**1**	**3**	**5**
Total	**50**	**8**	**10**	**8**	**9**	**15**

Arithmetic Level

Std	Total number of tested children	Beginner	Number Recog--nition (1-9)	Number Recog--nition (11-99)	Subtra--ction	Division
Std I	**10**	**4**	**4**	**2**	**0**	**0**
Std II	**10**	**1**	**4**	**4**	**1**	**0**
Std III	**10**	**1**	**2**	**4**	**2**	**1**
Std IV	**10**	**0**	**2**	**3**	**3**	**2**
Std V	**10**	**0**	**1**	**3**	**2**	**4**
Total	**50**	**6**	**13**	**16**	**8**	**7**

School Report Card

Village name:	School name:
Std: _____ to _____	DD/MM/YY of report card:

Reading Level							Arithmetic Level						
Std	Total number of tested children	Beginner	Letter	Word	Paragraph (Std I level text)	Story (Std II level text)	Std	Total number of tested children	Beginner	Number Recog--nition (1-9)	Number Recog--nition (11-99)	Subtra--ction	Division
Std I							Std I						
Std II							Std II						
Std III							Std III						
Std IV							Std IV						
Std V							Std V						
Total							**Total**						

Note: Use this format to make a School Report Card from the Test Compilation Sheets for all grades.

School Report Card

Village name:	School name:
Std: _____ to _____	DD/MM/YY of report card:

Reading Level							Arithmetic Level						
Std	Total number of tested children	Beginner	Letter	Word	Paragraph (Std I level text)	Story (Std II level text)	Std	Total number of tested children	Beginner	Number Recog--nition (1-9)	Number Recog--nition (11-99)	Subtra--ction	Division
Std I							Std I						
Std II							Std II						
Std III							Std III						
Std IV							Std IV						
Std V							Std V						
Total							**Total**						

Note: Use this format to make a report card from the compilation sheets of all grades.

How to analyze the School Report Card

In each grade, children learn some new elements of reading and arithmetic which help them move forward to the next academic year. For instance, children in Std III should know how to read a Std II level text (a simple story) and solve a 2-digit subtraction problem with borrowing. It is only then that we can say that the child is at grade level.

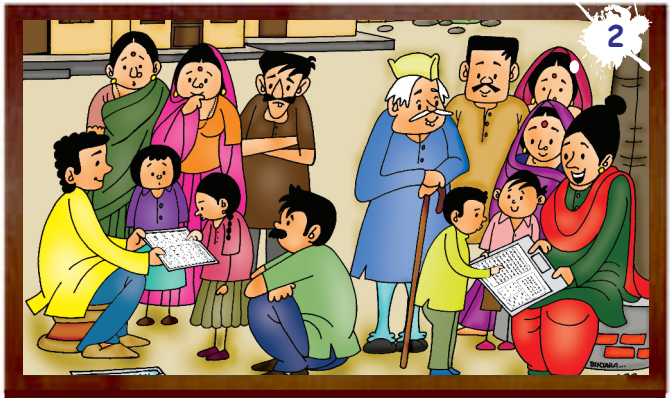
The School Report Card can be used to analyze the number of children in a school that are able to read and do arithmetic at grade level. Each row shows the variation in children's reading and arithmetic levels within a given grade. For example, look at the row for Std III in the given report card. Out of the 10 children in Std III, 1 cannot even read letters, 2 can read letters but not words or higher, 2 can read words but not paragraph or higher, 2 can read a paragraph but not story or higher, and there are only 3 children who can read a simple Std II level story. We must ensure that all children in Std III are at the story level.

Village name: Dogri							School name: Primary school Dogri						
Std: I to V							DD/MM/YY of report card: 17-02-2020						
Reading Level							**Arithmetic Level**						
Std	Total number of tested children	Beginner	Letter	Word	Paragraph (Std I level text)	Story (Std II level text)	Std	Total number of tested children	Beginner	Number Recog--nition (1-9)	Number Recog--nition (11-99)	Subtra--ction	Division
Std I	10	4	3	1	1	1	Std I	10	4	4	2	0	0
Std II	10	2	3	2	1	2	Std II	10	1	4	4	1	0
Std III	10	1	2	2	2	3	Std III	10	1	2	4	2	1
Std IV	10	1	1	2	2	4	Std IV	10	0	2	3	3	2
Std V	10	0	1	1	3	5	Std V	10	0	1	3	2	4
Total	50	8	10	8	9	15	**Total**	50	6	13	16	8	7

If you look at Std III, IV and V together, there are only 12 children out of 30 who can read a Std II level story. All such children will have to be helped to reach the story level. To do this, all children who are not at grade level should be grouped and taught according to their reading levels and not according to their current grade. The reason for this is that if children are unable to read at grade level, they will be unable to understand the curriculum textbook and will fall behind in class. To ensure that children are able to read with understanding when they progress to the next grade, they must be taught according to their reading levels with the appropriate methods and material. A similar analysis can be done for children's arithmetic levels. Unless children acquire the foundational skills of reading and arithmetic, they will not be able to make progress.

What can teachers do?
Time to take some action!

Identify a group of children in a school or in the community.



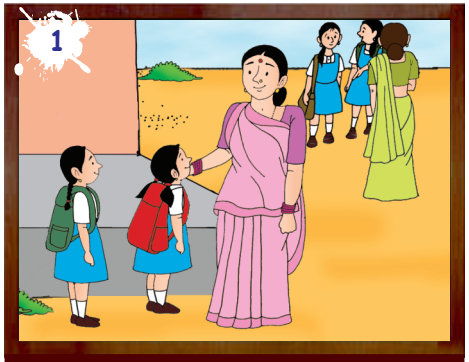
Use the ASER tool to find out if they can read a simple text and do basic arithmetic.

Group children by their learning level. Teach them using methods and materials for that level. Try to ensure that they can at least read at Std II level and do basic arithmetic.

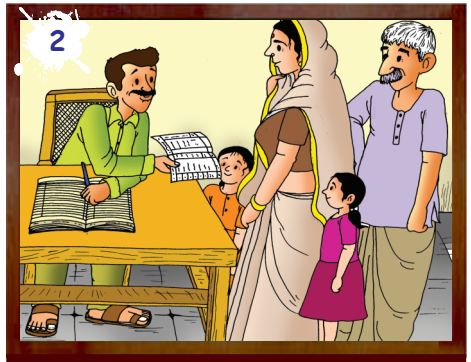
We hope that with extra efforts and encouragement in a few months these children will be reading and doing basic arithmetic.

Take responsibility for ensuring that children acquire basic reading and arithmetic skills. Without a strong foundation, children will not be able to move ahead in school.

What can parents do to improve children's learning?

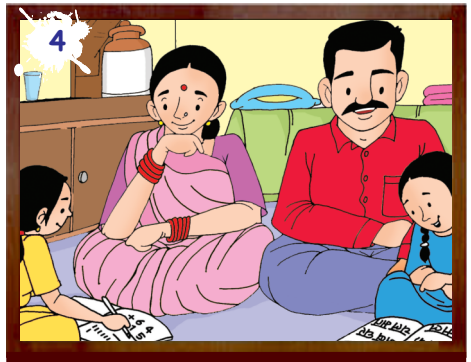


Send your children to school regularly.



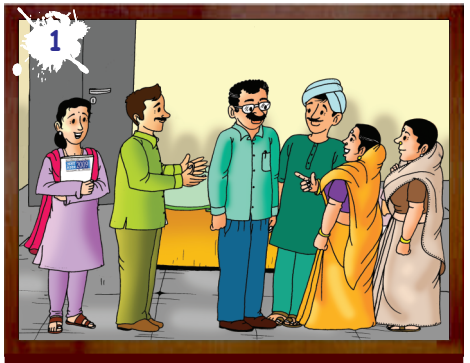
Visit the school from time to time. Talk to the teachers about how your child is doing. Ask what you can do to help at home.

Ask your child what he/she did in school. Ensure that he/she studies at home regularly.



Sit with your child when he/she does his/her homework.

What can the community do to improve children's learning?



Talk to the parents of children not going to school and encourage them to send their children to school regularly.

Build awareness on learning levels by frequently speaking to parents. Show them how to use the tool also.

Organize frequent education related activities for children, like drawing competitions and science fairs, where the whole community can take part.

Volunteer to teach children who need extra support.