

IBT

International Benchmark Test

Student assessment program
for Grade 3 to Grade 10

- English
- Mathematics
- Science

Compare performance
nationally and internationally.

Compare students between
grades and over time.

INVITATION TO JOIN THE IBT PROGRAM

from **Professor Geoff Masters AO**
Chief Executive Officer
Australian Council for Educational Research



Dear Fellow Educators,

I am writing to offer your school the opportunity to participate in the IBT assessment and reporting program developed by the Australian Council for Educational Research (ACER). ACER has created a global program of school-level tests in English, Mathematics and Science suitable for students across a range of countries. These high-quality tests enable teachers, parents and school leaders to monitor the educational development of students throughout their years of primary and secondary schooling.

The approaches we take to assessing learning and the way we report success or failure at school send powerful messages to students. Over recent years there has been a shift in the focus of educational measurement towards diagnostic assessment and towards a 'growth mindset'. With a comprehensive reporting program and diagnostic feedback, the IBT can assist educators in establishing the points that individuals have reached in their learning, in setting personal targets for further learning and in monitoring the progress that individuals make over time.

Assessments of progress are a welcome alternative to judging success only in terms of year-level standards. Importantly, the adoption of a growth mindset does not represent a lowering of expectations. On the contrary, it sets high expectations of every learner, including more advanced students who sometimes are not challenged or stretched at school.

The IBT assessment program draws on ACER's 85 years of experience in educational research. Requiring students to think about topics rather than just recall information, to apply their subject knowledge rather than just remember facts, the IBT is at the forefront of modern educational measurement. With more than 180,000 tests sat annually, and a growing number of schools worldwide participating, I can highly recommend the IBT program for all schools that want to monitor students as they make their way along their personal learning journeys.

Yours sincerely

A handwritten signature in black ink that reads "Geoff Masters". The signature is fluid and cursive, with the first letters of the first and last names being larger and more prominent.

ABOUT ACER

ACER is one of the world's leading educational research centres. Since it was established in 1930, it has built a strong reputation as a provider of reliable support and expertise to education policy makers and professional practitioners.

ACER has been instrumental in the implementation, management and reporting of large-scale international surveys such as TIMSS, PISA, PIRLS and ICILS.

ACER's mission is to create and promote research-based knowledge, products and services that can be used to improve learning across the life span.



ABOUT IBT

The IBT is an internationally administered program of assessments in English, Mathematics and Science for students in school Grades 3 to 10, with test booklets appropriate for each grade level.

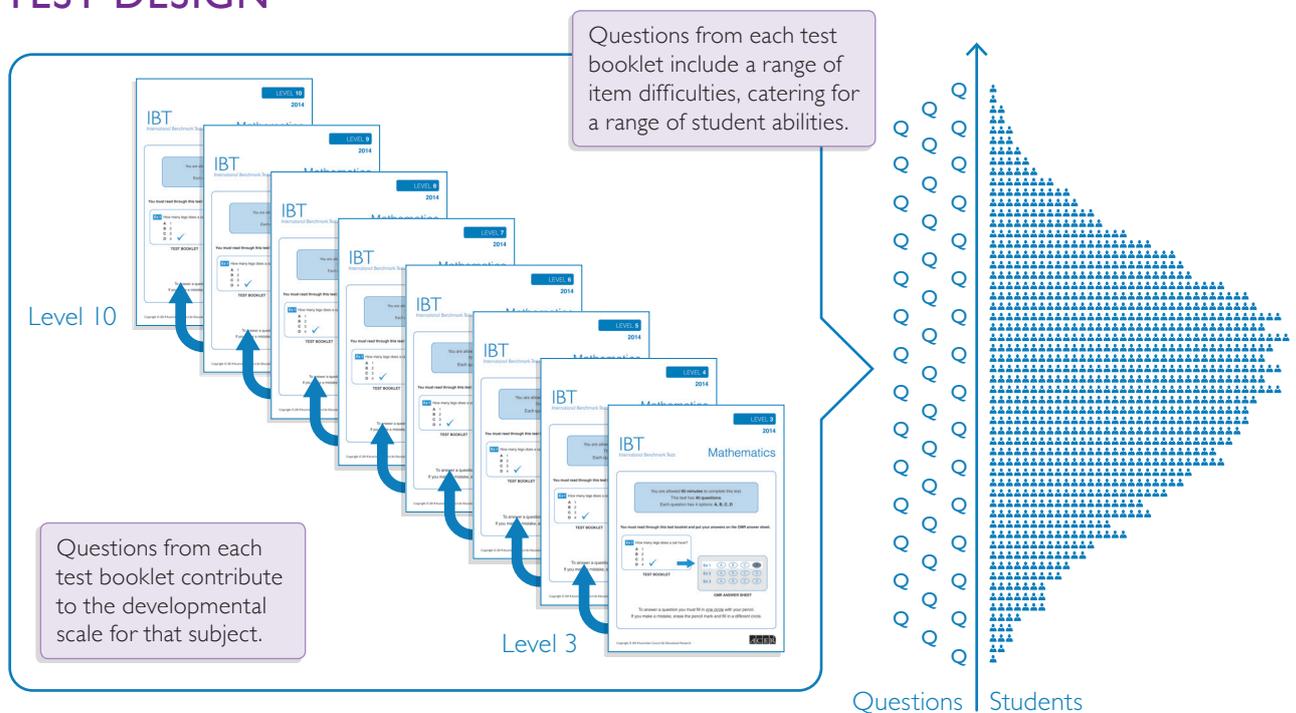
The IBT program was established in 2005 to provide schools in all countries with a high-quality skills-based assessment not linked to any national curriculum. This allows students from all countries to be compared fairly.

Schools use the IBT to:

- Identify student strengths and weaknesses in each subject.
- Provide teachers with reliable data to inform their teaching.
- Compare student and school performance nationally and internationally.
- Monitor student progress from one year to the next.

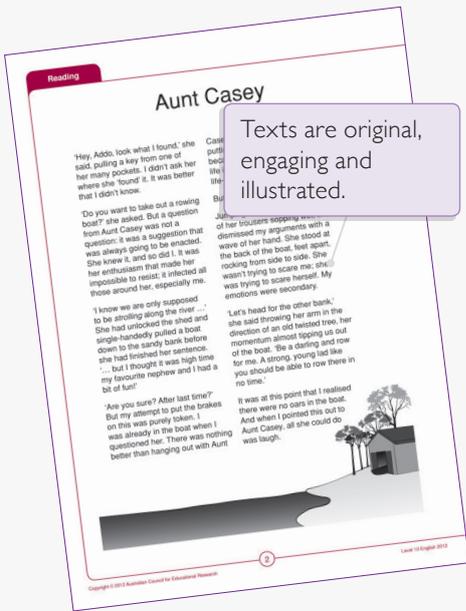
The IBT is written by a select team of ACER test-writing experts using the latest pedagogical research. Once the assessments have been sat and the data collected, ACER's experienced psychometricians use the Rasch model of Item Response Theory to analyse the results. ACER then produces developmental scales for each subject onto which students are placed.

TEST DESIGN



For each subject, there are eight test booklets (Level 3 to Level 10). The levels are linked 'vertically' using a few common test questions in the booklets of adjacent grade levels. This enables all students to be reported on that subject's developmental scale regardless of the test booklet sat. The tests are also linked 'horizontally' between calendar years by including a few test questions from previous years. This ensures the scale stays the same each year, enabling the monitoring of student growth over time.

TEST CONTENT



English

Questions are clear, concise and relevant.

1 Which word best describes Aunt Casey's attitude to life?

- A reckless
- B intolerant
- C thoughtful
- D responsible

Question intent: Infer the main character's attitude from her behaviour and speech in a narrative text.

Question intents explain the purpose of the questions to students, teachers and parents.

In the English tests, students are not asked merely to retrieve information from a passage; they are asked to make inferences, form judgements and reflect on the texts. Questions addressing higher-order thinking skills are used to ascertain whether a student can 'read between the lines' and understand subtlety and nuance in the English language.

Mathematics

1 This clock shows the correct time. Issam's watch shows



Issam's watch is

- A 8 minutes fast.
- B 8 minutes slow.
- C 12 minutes fast.
- D 12 minutes slow.

Questions are set out clearly on the page to help students navigate through the test.

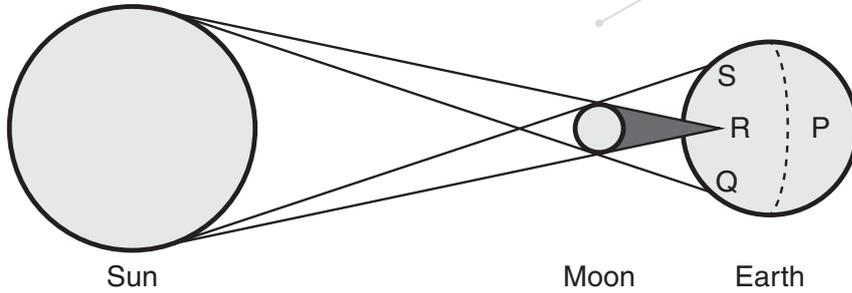
Multiple-choice options have been carefully designed to provide plausible distractors.

For Mathematics questions, students are asked to make sense of mathematical concepts in everyday situations. IBT Mathematics is not about simply remembering rules and procedures; it requires students to use higher-order thinking to apply their mathematical skills to solve problems.

Question intent: Calculates time difference between digital and analogue clocks and interprets this in context.

1 Michael is in the full shadow of a total solar eclipse.

Diagrams are simple, clean and appropriately labelled.



Which point shows where Michael is located?

- A P
- B Q
- C R
- D S

The reading load required to answer a Science question is kept very basic. This is to ensure scientific concepts are assessed, not a student's reading ability.

In the Science tests, students are asked to apply scientific principles to particular problems. IBT Science not only assesses students' knowledge of science, it assesses whether students are capable of applying this knowledge to the given contexts. Many of the higher-order thinking questions are based on scientific enquiry.

Question intent: Identifies position on Earth of full shadow during a total solar eclipse.

The IBT tests are skill based. They are aligned to but do not follow any single national curriculum. This allows students from all countries to be compared fairly.

The duration of each test is 60 minutes. There are 40–45 multiple-choice questions on each test.

ENGLISH Strands Assessed

- Reading Comprehension
- Spelling
- Punctuation
- Grammar
- Vocabulary

MATHEMATICS Strands Assessed

- Number
- Measurement
- Space
- Chance and Data

SCIENCE Strands Assessed

- Earth Science
- Physical Science
- Life Science



RESULTS AND REPORTS

The IBT program provides a comprehensive set of PDF and Excel reports to school leaders, classroom teachers, students and parents. The reports include:

- Student performance on each question and each subject strand.
- Subject scale scores to monitor student performance over time.
- Described achievement bands to outline each student's current skill set.
- Comparisons of students within the school, grade and class.
- Comparisons to national and international performance to see where students sit globally.
- National certificate of achievement for each student for each subject.



REPORTS FOR SCHOOL LEADERS



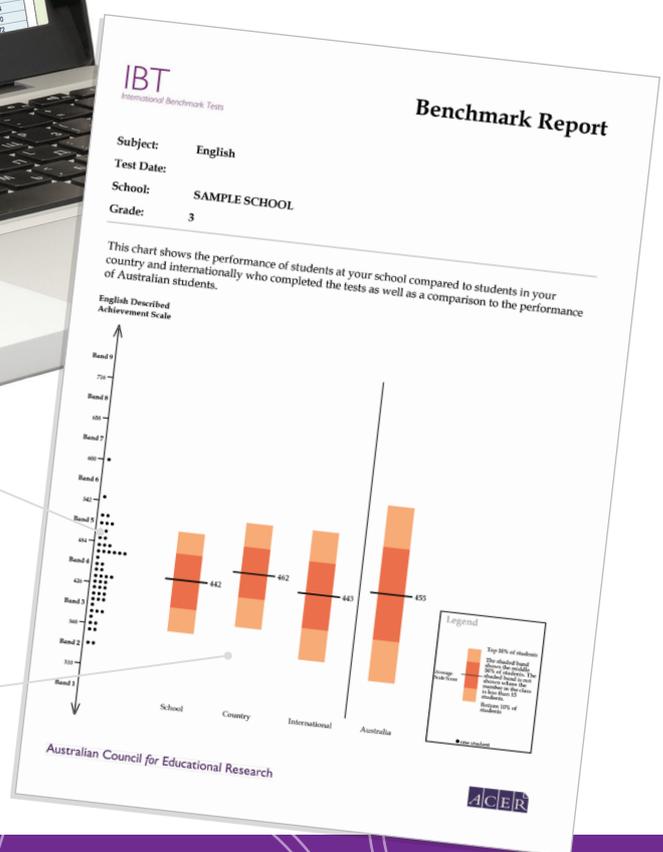
Receive an interactive report in MS Excel format.

See graphical comparisons at the click of a button.

Identify patterns and trends in student performance.

See how students perform against a developmental scale at a glance.

Benchmark report enables comparisons to other IBT schools nationally and internationally.



REPORTS FOR CLASSROOM TEACHERS

Test: English Level 3 Grade: 3 School Report

Student Responses

Strand	Comprehension										Grammar														
	C	C	C	C	C	C	C	C	C	C	G	G	G	G											
Question Number	6	21	1	7	9	39	8	23	4	10	2	37	36	5	3	30	40	25	24	22	14	11	13	12	15
School Results																									
Number of students assessed correct	46	45	44	42	37	41	37	32	34	32	23	24	25	31	23	30	22	18	13	48	48	50	47	30	
% of students assessed correct	88	87	85	81	71	79	71	62	65	62	44	46	48	60	44	58	44	42	35	25	92	92	96	90	58
Country/IBT International Comparison																									
% of students correct - *****	94	91	90	83	83	83	82	74	73	72	66	66	66	62	62	65	46	42	34	32	92	92	91	87	71
% of students correct - International	91	86	84	71	64	73	74	61	56	50	56	50	48	54	60	48	45	36	33	28	89	88	85	79	60

Australian Council for Educational Research

Described Achievement Report

Subject: English
 Test Date: October 2014
 School: SAMPLE SCHOOL
 Grade: 3

English Described Achievement Scale

Band 9: Demonstrate understanding of subtle relationships between complex characters in dense, highly nuanced narrative texts. Extract and explain consequential ideas from texts that contain sophisticated vocabulary and elaborate ambiguity. Make inferences about unfamiliar situations that go beyond the content of texts.

Band 8: Interpret interpersonal connections between characters in dense narrative texts. Demonstrate understanding of conflicting ideas and opinions within complex arguments. Infer authorial agenda and identify persuasive techniques used to influence an audience. Identify synonyms for very unusual and/or technical words in very unfamiliar or specific contexts.

Band 7: Integrate several parts of text and diagrams to identify key information. Interpret complex language to identify points of view in dense arguments. Identify author's position in opinion-based texts. Demonstrate a sound grasp of the grammar needed in complex negative sentences that contain clauses. Identify correct spelling of less frequently-used multi-syllable words with double vowels and silent letters.

Band 6: Interpret narrative's point of view in sophisticated narrative texts. Identify the purpose of particular paragraphs in opinion-based texts. Identify key ideas in factual texts where information is not presented. Correctly use adverbs in conditional and negative sentences. Correctly punctuate reported speech. Use colons to break complex sentences into clauses and subclauses. Identify correct spelling of less frequently-used words which are phonetically irregular. Identify synonyms for unusual words in unfamiliar contexts.

Band 5: Interpret information in straightforward factual texts using synonymous phrases. Use comparative attitudes in narrative texts. Identify purpose of particular sentences within a text. Correctly use gerunds and the perfect forms of verbs. Correctly use prepositions at the beginning of sentences. Use colons and semi-colons to separate sentences into two parts. Use apostrophes correctly. Identify correct spelling of less frequently-used words with regular spelling patterns. Identify synonyms for less common words in familiar contexts.

Band 4: Locate and combine information within or across short texts using low-level inferences. Link diagrams to text to retrieve specific information. Identify the purpose of simple texts. Demonstrate a good understanding of the basic tense forms of verbs. Use brackets to separate information in sentences. Identify where to place commas in a list. Identify spelling errors in frequently-used multi-syllable words with double letters. Identify synonyms for common words in unfamiliar contexts.

Band 3: Link paragraphs within short, simple texts to identify the main idea. Draw low-level inferences to identify characters' motivations in simple narrative texts. Identify the correct personal pronouns in simple sentences. Identify basic punctuation such as question marks. Identify spelling errors in frequently-used three and four syllable words. Identify synonyms for common words in familiar contexts.

Band 2: Locate detail-stated information in short narrative texts that contain high-frequency words and a familiar structure. Identify the correct adjectives in simple sentences. Understand where a sentence begins and ends. Identify spelling errors in frequently-used two-syllable words. Identify synonyms for very common, basic words.

Band 1: Locate prominent, explicitly-stated information at the start of very short, simple texts. Use present tense form of verbs. Identify full stops and commas. Identify spelling errors in very common single-syllable words.

Australian Council for Educational Research

Detailed data by subject strand.

See the responses of each student for each question.

Entire class or year level reported against the IBT developmental scale.

Student achievement bands describe the skills and understandings students have demonstrated.

REPORTS FOR PARENTS AND STUDENTS

IBT International Benchmark Tests

Name: A STUDENT
 Student ID: 123456789A
 School: SAMPLE SCHOOL
 Grade: 3

Student Report

This IBT report provides results for the International Benchmark Tests in the following subject:

Mathematics Level 3

Performance on Each Question
 Your result for each question.

Summary of Results by Strand
 The number and percentage of questions you answered correctly for each strand.

Percentile Rank
 Your percentile rank shows your standing relative to the other students who took the test.

Scale Score
 All results are equated to a common scale which enables you to track your performance between years at your school, in your country and for the IBT internationally.

Described Achievement
 Your scale score is shown on the IBT Described Achievement Scale.

This is to certify that

A STUDENT
 Grade 3
 SAMPLE SCHOOL

is awarded a
Certificate of Honour
 in the
Mathematics
 International Benchmark Tests

October 2014

Professor Geoff Munnings (CEO)
 ACER

Certificate of Honour
 Certificate of High Distinction
 Certificate of Distinction
 Certificate of Participation

Australian Council for Educational Research

Comprehensive student report shows parents how their child performed against national and international standards.

Certificates of achievement including honour, high distinction, distinction and participation.

7

ACER INDIA

The **Australian Council for Educational Research** (ACER) is one of the world's leading educational research and assessment agencies. Governments, school leaders, teachers and students around the world rely on ACER's expertise in the assessment of student learning, pedagogy and school leadership.

ACER works closely with partners such as the **OECD, UNESCO, UNICEF** and **The World Bank** to develop and implement innovative and rigorous assessments of student learning in a wide range of contexts.

Established in 2004, ACER India brings the expertise of ACER to India. Our dedicated team of staff are based in New Delhi and work to provide technical expertise, advice and support to partners such as the **CBSE, NCERT, UNICEF**, state governments and NGOs in carrying out their educational activities. ACER India also supports schools through the publication of Teacher magazine and a wide range of research-based books.

Recent work undertaken by ACER India includes:

- Development of Indian Progressive Achievement Scale (IPAS), Internal Project 2013.
- Bangladesh National Student Assessment at Primary and Secondary Level, World Bank Bangladesh, 2013.
- Student Learning in the Government Schools of Haryana, Haryana Board of School Education, 2014.
- Improving Quality Education and Children's Learning Outcomes and Effective Practices in Southern and Eastern African Region (ESAR), UNICEF Kenya, 2014.
- Technical Support for National Achievement Survey (NAS), NCERT 2015.
- Strengthening Learning Assessment Capacities at Rajya Shiksha Kendra(RSK), Bhopal, Madhya Pradesh, UNICEF India, 2016-2017.
- Support for the National Assessment Capacity Building for The Government of the Republic of Maldives, 2017-2018.

Dear Principal,

I am very pleased to invite your school to participate in the **International Benchmark Test (IBT)**. The IBT is the most rigorous test of student learning available in India, offering the assessment of students from classes 3 to 10 in the core subjects of **Mathematics, English and Science**.

The IBT is underpinned by extensive research and international best practice in the development of assessments of student learning. It offers schools a tool that delivers valid and reliable results which enable the achievement of students to be benchmarked against their peers from around the world.

The highly specific feedback in IBT reporting is invaluable in helping teachers and school-leaders to pinpoint particular strengths and weaknesses of students in the key subjects that are assessed, thus allowing them to target specific areas for individual students. This provides rich insights that inform teaching practices in order to support better student learning. From a management standpoint, the IBT supports schools in improving learning levels across the board, thus improving the overall performance of the school.

My colleagues and I welcome any questions that you may have, and look forward to your participation in the IBT.

Best wishes,

Amit Kaushik

CEO, ACER India



For more detailed information about IBT, visit

<http://ibt.acer.org>

For any further assistance, contact the

IBT team on 011 46504535

or email test.india@acer.edu.au

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