GRADE 3
CURRICULUM GUIDE

School Year 2018-2019
As an International Baccalaureate (IB) World School, we at Bonn International School are committed to the Primary Years Programme (PYP). This is the IB programme designed for students aged 3–12 years. At BIS, students are in the PYP from Early Learning until Grade 5. The PYP is the best preparation for the IB programmes that follow, the Middle Years Programme (MYP) in Grades 6 - 10 and the Diploma Programme (DP) in Grades 11 and 12.

The PYP is an international curriculum framework, based on best practice and research from around the world. The programme focuses on the development of the whole child, both in the classroom and in the world outside. We challenge students to excel in their learning and in their personal growth, and we aim to inspire in them a quest for learning throughout life.

Learning in the PYP is:

*Inquiry-based:* We believe children learn best through structured, purposeful inquiry. Students are expected to play an active role in, and take responsibility for, their own learning. Students are encouraged to ask questions, investigate and find ways to answer these questions, and to sustain this enjoyment of learning throughout life.

*Collaborative:* Learning is a social endeavour, and there is great emphasis on sharing, group work and collaboration at our school. Students learn to communicate well, to encourage each other, and to develop an open mind so they can learn from each other.

*Differentiated:* The learner is at the heart of our curriculum framework. Children come to school with a range of experiences, backgrounds and prior knowledge. Teachers in the PYP aim to
design learning to suit children at all different levels of competence or experience, providing support for those who need it, and extensions for those who need more challenge.

*Concept-driven:* Students spend their time at school exploring and learning about important concepts that have relevance in their own lives, and that they can transfer to other contexts. Our aim is to develop students’ understanding of big ideas, not just their knowledge or skills.

**The Learner Profile and Attitudes**

International mindedness is defined by the IB in the attributes of the Learner Profile. The PYP curriculum design supports students in developing these attributes, which are actively modeled by all members of our learning community. The Learner Profile attributes, together with the attitudes, help develop internationally minded people. We want our learners to become:

**Inquirers:**
We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

**Knowledgeable:**
We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

**Thinkers:**
We use critical and creative thinking skills to analyze and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

**Communicators:**
We express ourselves confidently and creatively in more than one language and in many forms. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

**Principled:**
We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

**Open-minded:**
We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.
Caring:
We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

Risk-Takers:
We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

Balanced:
We understand the importance of balancing different aspects of our lives — intellectual, physical, and emotional — to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

Reflective:
We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

The PYP attitudes are the values that are embedded in our programme, and many of these directly contribute to developing the Learner Profile attributes. We actively model and encourage the following attitudes towards the world and its people:

- Appreciation
- Commitment
- Confidence
- Cooperation
- Creativity
- Curiosity
- Empathy
- Enthusiasm
- Independence
- Integrity
- Respect
- Tolerance

Concepts
Our aim is for students to develop an understanding of big concepts, to explore these concepts in different ways, and to be able to apply their understanding of these concepts to new and unfamiliar situations. Our Units of Inquiry are organized in such a way that they offer opportunities for students to explore the **PYP key concepts** multiple times and in lots of ways throughout the PYP. These key concepts are:

- Form (what is it like?)
- Function (how does it work?)
- Change (how is it changing?)
- Connection (how is it connected to other things?)
- Causation (why is it like it is?)
- Reflection (how do we know?)
- Responsibility (what is our responsibility?)
- Perspective (what are the points of view?)
Approaches to Learning
Students develop a range of transdisciplinary skills throughout the PYP. These skills are divided into the following sets of skills:

*Communication skills*
*Social skills*
*Self-management skills*
*Research skills*
*Thinking skills*

**Action**
We believe that real learning will lead to some action or some change in attitude or thinking. Once something is learned and fully understood, it will lead to action of some kind. Student action in the PYP can be big or small, happen at school or at home, and will develop over time. Examples of student action might be: including more people on the playground, choosing healthy foods, trying a new activity, turning off the lights when leaving a room, and lots more.
The Programme of Inquiry in Grade 3

Each school year, students explore six different ‘Units of Inquiry’. Each unit of inquiry lasts for approximately 6 weeks. The units are designed to be relevant, significant, engaging and challenging, as well as developmentally appropriate. Our units provide the context for much of the learning in Language and Mathematics, as well as all content within Science and Social Studies. Units of Inquiry are transdisciplinary and, where appropriate and authentic, connections are also made between the units and the single subjects Music, Visual Arts, German and PE.

Grade 3 Units of Inquiry 2018-2019:

<table>
<thead>
<tr>
<th>Who we Are</th>
<th>Where we are in Place and Time</th>
<th>How we Express Ourselves</th>
</tr>
</thead>
<tbody>
<tr>
<td>An inquiry into the nature of the self; beliefs and values; personal, physical, mental, social and spiritual health; human relationships including families, friends, communities, and cultures; rights and responsibilities; what it means to be human.</td>
<td>An inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationships between and the interconnectedness of individuals and civilizations, from local and global perspectives.</td>
<td>An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; our appreciation of the aesthetic.</td>
</tr>
</tbody>
</table>

Central idea
Our rights and responsibilities help build communities.

Lines of Inquiry:
-Our rights and responsibilities
-The convention on Human Rights
-How rights and responsibilities help build communities

Central idea
The explorations of mankind have an impact on cultures, communities and the environment.

Lines of Inquiry:
-Reasons for exploration
-The discoveries and experiences of explorers
-The impact of exploration on cultures, communities, and the environment

Central idea
Language as an art form helps to expand and express our understanding of the world.

Lines of Inquiry:
-Using language as an art form
-The use of language to extend our understanding
-Using language to express ourselves
### How the World Works

An inquiry into the natural world and its laws; the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.

#### Central idea
Human survival is connected to understanding the continual changing nature of the Earth.

#### Lines of Inquiry:
- How the different components of the Earth are interrelated
- Why the Earth has changed and is continuing to change
- Human responses to the Earth’s changes

### How we Organize Ourselves

An inquiry into the interconnectedness of human-made systems and communities; the structure and function of organizations; societal decision-making; economic activities and their impact on humankind and the environment.

#### Central idea
In a workplace people share responsibility towards a common purpose.

#### Lines of Inquiry:
- The purposes of workplaces
- How workplaces are organized
- How people work together to achieve a common purpose

### Sharing the Planet

An inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationships within and between them; access to equal opportunities; peace and conflict resolution.

#### Central idea
Climate change affects ecosystems around the world in different ways.

#### Lines of Inquiry:
- Measurement of weather
- Causes of changes in climate
- The effects of climate change on ecosystems and the living things in them
- Human responsibility in dealing with climate change

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### Languages

**Language**

English is our shared language of instruction and communication. In a PYP school the focus is not just on learning language in isolation, but also on the application of language skills across the subject areas and throughout the Programme of Inquiry. Some language is taught as ‘stand-alone’, while other aspects of language are taught in the context of our Units of Inquiry. We believe students learn best when they have opportunities to learn within meaningful contexts, and when the teaching is in response to students’ needs, interests and previous experiences. Students at BIS come from a wide range of language and cultural backgrounds, which we view as a major asset to our learning community.

In a PYP language classroom:
- Students and teachers appreciate language diversity
- All students feel supported in taking risks in language learning
- There are close connections with the Media Centre, other classrooms and single subject teachers
- Students connect to the broader world through technology
- Students have many opportunities to engage with high-quality literature

Students develop skills in the following strands of language learning:
- Written Language: Reading and Writing
- Oral Language: Listening and Speaking

Our English programme encompasses a readers’ and writers’ workshop model, as well as offering opportunities to develop speaking and listening skills within an integrated programme.

Students develop skills and understandings across the four areas of language learning.

<table>
<thead>
<tr>
<th>Reading</th>
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<tbody>
<tr>
<td>• Different types of texts serve different purposes</td>
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<tr>
<td>• The structure and organization of written language influences and conveys meaning</td>
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<tr>
<td>• Reading and thinking work together to enable us to make meaning</td>
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<tr>
<td>• Applying a range of strategies helps us to read and understand new and more complex texts</td>
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<tr>
<td>• Identifying the main idea in a text helps us to understand what is important</td>
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<table>
<thead>
<tr>
<th>Writing</th>
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<tr>
<td>• Writing and thinking work together to enable us to express ideas and convey meaning</td>
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<tr>
<td>• Asking questions of ourselves and others helps to make our writing more focused and purposeful</td>
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<tr>
<td>• The way we structure and organize our writing helps others to understand and to appreciate it</td>
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<tr>
<td>• Rereading and editing our own writing enables us to express what we want to say more clearly</td>
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<tr>
<td>• The structure of different types of texts includes identifiable features</td>
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<tr>
<td>• We write in different ways for different purposes</td>
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<table>
<thead>
<tr>
<th>Speaking and Listening</th>
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<tbody>
<tr>
<td>• Taking time to reflect on what we hear and say helps us to make informed judgments and form new opinions</td>
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<tr>
<td>• Spoken communication is different from written communication - it has its own set of rules</td>
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<tr>
<td>• Thinking about the perspective of our audience helps us to communicate more effectively and appropriately</td>
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<tr>
<td>• Spoken language varies according to the purpose and audience</td>
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Readers and Writers Workshop:
We work with the Readers and Writers Workshop model, based on the resources developed by the Columbia University Teacher’s College Reading and Writing Project. The workshop model consists of several components each day, allowing for teachers to teach specific skills and for students to have time to practice and apply the skills taught. The workshop model also allows teachers to support and challenge all students, no matter their level of competence. Each year, we teach four Writing Units of Study and four Reading Units of Study.
Writing Units of Study in Grade 3:
- ‘Small moments’ - writing personal narratives
- ‘The Art of Information Writing – Expository Nonfiction’
- ‘Once Upon a Time’ - adapting and writing fairy tales
- ‘Changing the World – Persuasive writing’

Reading Units of Study in Grade 3:
- ‘Building a Reading Life’ - developing routines as a reader, building stamina
- ‘Navigating Nonfiction in Expository text’ - determining importance
- ‘Following Characters into Meaning’ - developing comprehension and analysis skills
- ‘Solving the Mystery before the Detective’ - reading mysteries

**Spelling:**
We work with the spelling programme ‘Read Write Inc.’. Students take part in short, focused sessions which are based on structured and cumulative activities exploring rules and concepts, enabling the students to become confident at spelling familiar and unfamiliar words.

**German**
All students at BIS study the German Language. Students enter either German Language and Literature (for students who speak German at a mother tongue level) or German Language Acquisition (for students learning German as an additional language). German Language Acquisition is further divided into 3 phases of language acquisition. Students are carefully assessed and monitored to ensure accurate grouping of students. Students of all classes within the grade level have German at the same time, as we have four different groups with our four German teachers. As in the English language, students work on written and oral communication skills in German. Aspects of German culture are explored through our host country celebrations such as St. Martin in November and Karneval in February.

**Mathematics**
We believe that students learn best through purposeful, structured inquiry. The aim of our mathematics programme is to develop students into confident mathematical thinkers, with a sound knowledge of number and the creativity to apply this knowledge to solve problems in many ways. Our main resource for teaching mathematics is the New Zealand Numeracy Framework, an inquiry-based model for teaching mathematics. This framework involves a clear outline of progression in number knowledge and strategies, as well as rigorous assessment tools for tracking students’ development. Mathematics lessons are usually differentiated, with students working on a variety of tasks in various different flexible groupings, in order to challenge and support all students, regardless their level of competency or experience. For more information on the NZ Numeracy Framework, follow this link to the parent section of the website (please note that Grade 3 at BIS is the equivalent of Year 4 in New Zealand):

http://nzmaths.co.nz/families
The different strands of Mathematics are:
- Number (Addition and Subtraction, Multiplication and Division, Proportion and Ratios)
- Geometry and Measurement
- Statistics and Probability

In Grade 3, students work within the Number Strand for about 60/70% of the mathematics teaching time. Students typically work through Stage 5 of the Numeracy Framework, though of course some students may work in a higher or lower stage. The expectation is that students have mastered all outcomes within Stage 5 at the end of Grade 3. The strategies and knowledge in this phase will take about two years to develop completely, and some aspects might be consolidated earlier or later than other aspects.

Specific outcomes in Stage 5 are:

Number Knowledge
- Identify numbers on the range 0-1000
- Say the forwards and backwards number word sequence by ones, tens and hundreds in the range 0-1000
- Order the numbers in the range 0-1000
- Recall doubles to 20
- Recall addition and subtraction facts to 20
- Recall groupings within 100
- Recall the number of tens and hundreds in 100s and 1000s
- Round three digit whole numbers to the nearest 10, or 100
- Identify the symbols for halves, quarters, thirds, fifths and tenths
- Order fractions with the same denominator
- Know the number 1, 10, 100 before and after a given number in the range 0-1000

Number Strategies
- Solve addition and subtraction problems by using doubles
- Solve addition problems by using compatible numbers
- Solve addition and subtraction problems by going through tens
- Solve addition and subtraction problems by using place value partitioning
- Solve addition and subtraction problems by compensating with tidy numbers
- Solve multiplication problems by using repeated addition
- Solve 5 times tables by doubling and halving
- Find unit fractions of sets
- Find unit fractions of regions
- Solve division problems by sharing
Geometry in Grade 3
- Describe the difference between movement and direction
- Order a set of movement and direction instructions
- Create a set of instructions
- Use a map to identify views from a location
- Use compass directions to describe the direction of landmarks
- Describe pathways between map locations
- Make shapes with tessellations
- Investigate shapes that tessellate
- Make geometric patterns by translating, reflecting and rotating
- Create simple tessellations
- Identify repeating elements in simple tessellations

Measurement in Grade 3
- Recognize the need for a standard unit of area
- Measure surfaces using square centimetres
- Estimate the measure of surfaces using square cm
- Recognize the need for a standard unit of volume
- Measure to the nearest litre and half litre
- Make sensible estimates about the volume of given objects
- Carry out conversions between ml and liters
- Estimate volume using litres and millilitres
- Accurately measure using litres and millilitres
- Estimate weight in kg and grams
- Measure accurately using kg and grams
- Record measurements in kg and g using decimal notation
- Discuss the need a standard measure of mass
- Make sensible estimates about the mass of given objects
- Understand clockwise and anticlockwise directions
- Estimate and measure angles using other angles

Statistics and Probability in Grade 3
- Make statements about probabilities shown on a spinner and evaluate others’ statements, providing reasons
- Play probability games and discuss all possible outcomes
- Compare and order the likelihood of simple events
- Discuss the fairness of games and adjust rules to make the game fairer
Personal, Social and Physical Education (PSPE)

Personal and Social Education
The development of a student's well-being is addressed through all areas of the PYP curriculum. Therefore students' social, personal and emotional development is the shared responsibility of all teachers at BIS. Children are given guidance to help develop positive attitudes and behaviours in order to meet challenges, make healthy lifestyle choices, and become successful learners.

Physical Education
Physical Education at BIS is about more than just student participation in sports and games. Its purpose is to develop a combination of transferable skills promoting physical, intellectual, emotional and social development. During the PYP, we endeavor to provide meaningful opportunities for learning about movement and through movement in a range of contexts.

Students in Grade 3 have PE lessons in the Sports Hall two periods per week. Depending on the time of year, some lessons take place outside on our fields.

PE units in Grade 3 include:
- Floor Hockey
- Parkour and Gymnastics
- Movement Composition: Cultural elements
- Cross country and skipping rope
- Netball and Basketball
- Adventure challenge - Team Building

The Arts
Learning about and through the Arts is fundamental to the development of the whole child. It promotes creativity, critical thinking, problem-solving skills and social interactions. Through our Arts Programme students develop attitudes such as appreciation, empathy and Learner Profile attributes such as being a communicator and a risk-taker.

At BIS students have three periods of Visual Arts and three periods of Music over a ten-day cycle. Lessons take place in the Primary Art Room and the Primary Music Room in the Agora building.

Visual Art units in Grade 3 include:
- Rain Makers and Painting Techniques
- Silhouettes
- Realistic Drawing
- Water Colour and Acrylic Paint
- Lettering and Calligraphy
Music units in Grade 3 include:

- Recorder ensemble
- Singing (as part of the Upper Primary School Choir)
- Musical elements: Timbre
- Music appreciation: Poetry and Music

Seesaw

Students are involved in learning how to assess, and reflect on, their own and others’ work. Seesaw is an online assessment, journal and portfolio tool. Seesaw is used to record student progress, to plan for their next steps in learning and to document the learning journey. Parents log on to see and respond to examples of their children’s learning.

Assessment and Reporting

In the PYP assessment is integral to all teaching and learning. We use assessment data to inform our planning. This enables us to differentiate our programme so that each student is included, engaged and challenged at their own level.

Teachers use a range of assessment strategies and tools for formative (assessment FOR learning) and summative (assessment OF learning) assessments.

We also use a range of standardized assessment tools to keep track of children’s progress, in Grade 3 these include:

- Developmental Reading Assessment (DRA) - administered at least twice a year to give an indication of reading level
- Spelling assessments linked to our programmes
- GloSS (Global Strategy Stage) Mathematics Assessment - administered at least twice a year to track student progress through the New Zealand Numeracy Framework
- Measures of Academic Progress (MAP) testing - administered twice a year in Reading, Mathematics and Language Usage. This test measures student growth over time and compares students’ academic performance to that of their peer group around the world.

More information can be found on: https://www.nwea.org/assessments/map/

Annual Reporting Cycle

There are several opportunities each year for parents to be informed about their child’s progress at school. In addition to the scheduled conferences, parents are encouraged to engage in open conversations with their child’s teachers throughout the year, and can make appointments to speak with the teachers whenever they so wish. Teachers may also request additional meetings with parents if needed. Scheduled reporting times are:
<table>
<thead>
<tr>
<th>October</th>
<th>Parent Teacher Conferences</th>
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<tbody>
<tr>
<td>February and June</td>
<td>Written End-of-Semester Report (published on ManageBAC)</td>
</tr>
<tr>
<td>April</td>
<td>Student Led Conferences</td>
</tr>
</tbody>
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**Student Support**

At BIS, we have a range of ways in which we support our students. We believe that sound relationships between teachers, support staff and students, as well as between students, are vital to ensure a good learning environment. Our aim is for all our students to feel safe, to feel accepted, to feel included and to feel cared about. We have a Primary School Counselor, who works with those students who might need some additional emotional or social support. She also works with whole classes on issues that might impact all children, such as bullying or safety issues.

The philosophy of the Learning Support Department at BIS is to empower students with learning differences to become confident, independent, well-balanced, responsible global citizens who can self-advocate and find their own path to success. Our Learning Support Programme is designed for students with mild to moderate learning difficulties. The LS teachers work in collaboration with homeroom teachers and parents to ensure that these students can make progress and show academic growth.