

Matematik

Lärarinformation

Självbedömning
Instruktioner (elev)
Berättelsen

ENGELSK VERSION

ÅRSKURS

3

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1. Genomförande av delprov A

Delprov A är en muntlig uppgift som genomförs i grupper om 3–4 elever.

Tabell 3. Praktisk information

Delprov	Tidsåtgång	Material
Delprov A	Cirka 20–30 minuter per elevgrupp inklusive instruktioner	Underlag samt instruktioner

Beskrivning av delprovet

Nedan finns instruktioner för genomförandet av delprov A, som handlar om problemlösning och att resonera kring uppgifter inom tal i bråkform.

Genom undervisningen i ämnet matematik ska eleverna sammanfattningsvis ges förutsättningar att utveckla sin förmåga att

- formulera och lösa problem med hjälp av matematik samt värdera valda strategier och metoder
- använda och analysera matematiska begrepp och samband mellan begrepp
- föra och följa matematiska resonemang
- använda matematikens uttrycksformer för att samtala om, argumentera och redogöra för frågeställningar, beräkningar och slutsatser.

Uppgifterna kan hänföras till följande delar av kunskapskravet:

- Eleven kan lösa enkla problem i elevnära situationer genom att välja och använda någon strategi med viss anpassning till problemets karaktär. [...] Eleven beskriver tillvägagångssätt och ger enkla omdömen om resultatens rimlighet.
- Eleven har grundläggande kunskaper om matematiska begrepp och visar det genom att använda dem i vanligt förekommande sammanhang på ett i huvudsak fungerande sätt. [...] Eleven kan även ge exempel på hur några begrepp relaterar till varandra. [...] Eleven visar grundläggande kunskaper om tal i bråkform genom att dela upp helheter i olika antal delar samt jämföra och namnge delarna som enkla bråk.
- Eleven kan beskriva och samtala om tillvägagångssätt på ett i huvudsak fungerande sätt och använder då konkret material, bilder, symboler och andra matematiska uttrycksformer med viss anpassning till sammanhanget. [...] Eleven kan föra och följa matematiska resonemang [...] genom att ställa och besvara frågor som i huvudsak hör till ämnet.

Organisation av genomförandet på skolan

Eleverna ska arbeta i grupper om 3–4 elever. Tänk igenom på vilket sätt du sätter samman grupperna så att eleverna har möjlighet att visa sina kunskaper på bästa sätt. Om läraren bedömer att det är mer lämpligt för någon elev att genomföra delprov A enskilt med läraren är det möjligt. Man bör dock vara medveten om att det begränsar elevens möjlighet att föra och följa resonemang.

För att kunna följa elevernas arbete bör du enbart observera en grupp åt gången. Bedömningsunderlag för delprov A finns som Kopieringsunderlag 1 i häftet *Bedömningsanvisningar*. Markera i underlaget för varje elev vad hon/han visar. Använd ett bedömningsunderlag för varje grupp. Bedömningsunderlaget bygger på de förmågor som uppgiften avser att pröva.

Som stöd för bedömningen av elevernas prestationer finns i häftet *Bedömningsanvisningar* kapitel 2, exempel på autentiska elevcitater inom respektive förmåga. Samtliga citat bedöms vara på en godtagbar nivå.

Det kan vara svårt att hinna med att skriva ned vad eleverna samtalar om, därför kan det vara bra att spela in elevernas samtal. Om det inte finns möjlighet att spela in är det viktigt att läraren under tiden eller direkt efteråt skriver ned vilket kunnande eleven visat. För att uppmuntra kommunikationen mellan eleverna och ge alla elever möjlighet att komma till tals, är det viktigt att följdfrågor ställs. Exempel på följdfrågor finns i detta häfte under *Genomförande vid provtillfället*. Det som ska sägas till eleverna står inom citationstecken.

I denna uppgift är inte det viktigaste att komma fram till rätt svar utan att eleverna får möjlighet att kommunicera och resonera med varandra.

Lärarens förberedelser

Läs igenom *Lärarinformation* och *Bedömningsanvisningar* för delprov A innan delprovet genomförs med eleverna. En förutsättning för delprovets genomförande är att läraren är väl insatt i hur uppgiften ska genomföras och hur elevernas prestationer ska bedömas. Därför kan det vara lämpligt att pröva uppgiften tillsammans med kollegor innan delprovet genomförs med elever.

Klipp ut:

- tårta
- delar som föreställer tårtbitar
- kort med ledtrådar
- kort med tal i bråkform
- kort med namn

Kopiera:

- Bedömningsunderlag till delprov A (kopieringsunderlag 3 i *Bedömningsanvisningar*).

På följande sidor finns genomförandet beskrivet. Dessa sidor kan med fördel kopieras för att ha med som stöd vid genomförandet.

Genomförande vid provtillfället

Introduktion till elevmaterialet

"In this task, you are going to work together and reason and discuss with each other. To reason and discuss means that you will be thinking out loud together, describing what it is you are thinking and why. It is important that everyone in the group participates and that you show what you are able to do in mathematics."

Moment 1

1. Lägg fram tårtan mitt på bordet.

"Nova, Troj, grandmother and grandfather are going to share a cake. They get different sized pieces of cake. Your task is to find out together how big a part of the cake is left when everyone has got their pieces. You will get some clues that will help you."

2. Läs ledtrådarna på korten (förutom den extra ledtråden), en i taget, och lägg dem så att alla elever ser dem.

"Your task is to find out together how much of the cake is left when Nova, Troj, grandmother and grandfather got their pieces."

3. Lägg kortet med frågan *How much of the cake is left?* bredvid tårtan. Uppmana eleverna att fundera tysta för sig själva en stund.
4. Lägg fram de utklippta delarna sorterade var för sig i buntar (en halv, 2 stycken tredjedelar, 2 stycken fjärdedelar, 2 stycken sjättedelar och 4 stycken åttondelar) samtidigt som du säger:

"You are now going to solve the task together. You have some fraction materials to help you solve the problem. The materials represent the pieces of cake."

Uppmana eleverna att, allteftersom de löser ledtrådarna, placera delarna på tårtan och att vara noggranna när de jämför delarna. De kan även använda korten med namn för att markera vems tårtbit det är.

Under tiden som eleverna samtalar och resonerar observerar du dem för att få underlag till din bedömning. Om en elev inte deltar eller får tillräckligt med talutrymme i gruppen är det viktigt att du uppmärksammar detta och riktar en fråga direkt till berörd elev.

Om eleverna väljer en tredjedel för att representera morfars del ska du be dem kontrollera att varje persons del stämmer med det som står på ledtråden. Här behöver eleverna få jämföra och pröva delarna mot varandra. När eleverna upptäcker att morfars del är större än en tredjedel frågar du om de vill ha en till ledtråd och lägger fram den extra ledtråden där det står: *The piece that grandfather gets consist of two parts.*

5. När eleverna kommit fram till en lösning ställ då till exempel följande frågor:
 - "There is one piece of cake left. What is this called?"
 - "How do you know you have chosen the correct piece for grandmother?"
 - "How do you know you have chosen the correct piece for Nova?"
 - "How do you know you have chosen the correct piece for Troj?"

- "How do you know you have chosen the correct piece for grandfather?"
- "Is it possible to check/verify?"
- "How do you know that it is true?"
- "Is there someone who does not agree?"
- "Can you explain to others to help them understand?"
- "What could you call the two pieces that grandfather got?"
- "How big a piece did grandfather get?"
- "How big a piece did Nova and grandmother get together?"
- "How many eights did grandfather get?"

Ställ sedan följande frågor:

- "Which clue helped you begin to solve the problem?"
- "Can you explain why?"

Moment 2

1. Låt tårtan med de utklippta delarna ligga kvar på bordet. Även de delar som inte använts till tårtan ska ligga framme. Ta fram de utklippta korten med talen i bråkform, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{6}$, $\frac{1}{8}$.

"Which fraction card belongs with the different parts?"

Uppmana en elev i taget att välja ett kort och placera det på rätt del.

2. Om du behöver mer underlag till din bedömning kan du till exempel fråga:
 - "How do you know that this is $\frac{1}{2}$..., $\frac{1}{3}$..., $\frac{1}{4}$..., $\frac{1}{6}$..., $\frac{1}{8}$?"
 - "What does two, three, four, six, eight mean in the different numbers?"
 - "What does one mean in the different numbers?"
 - "How many fractions would you need to make one whole?"
 - "Is it possible to check/verify?"
 - "How do you know?"
 - "Is there someone who does not agree?"

Bedömning av delprovet

För bedömningen av elevernas prestationer på delprovet finns det röda häftet *Bedömningsanvisningar*. Detta delas ut till läraren när provmaterialet kommer till skolan.

The story – The pet shop

Introduction

Nova and Troj are visiting Nova's grandmother and grandfather in their pet shop. They have finally been able to open a pet shop. It has been their dream to do this for many years. Neither grandmother nor grandfather were able to have pets when they were children, so they had to wait until they were grown up. Now they have several different types of pets at home.

"It was fantastic when I met you," says grandmother, smiling at grandfather. "Meeting someone who loved animals as much as I did! As time went on we felt that it wasn't enough to just have our own pets at home, so we started to dream about having a pet shop together," she continues, laughing.

They have had their pet shop for almost a year now. Nova and Troj can come visit the shop or help out as much as they want.

Grandmother and grandfather are actually called Elena and Ivan but nearly everyone, even Nova and Troj's friends, always calls them grandmother and grandfather. Lots of their friends of course also want to visit the shop. At school, the class has just got an aquarium that is going to be filled with different fish, and they will take care of it together. So far they have just read a lot about how to look after it and how to keep the fish happy. But soon it is time to choose and buy fish, plants and other things they need.

In the shop there are many different types of animals. There are various birds, fish and small animals such as rabbits, guinea pigs, hamsters and mice. The shop is fairly full as there are of course many other things you need for your pets, like food, dog bones, toys, cages and other items.

Grandmother and grandfather have a parrot called Pear. He can talk and is able to say many different words. He is also good at mimicking sounds and people's voices. Pear does not like being alone, so he always gets to come along to the shop. He prefers to sit on someone's shoulders instead of being in his cage.

When they are at home, Pear loves to watch TV, especially children's programmes. He has a favourite programme that has lots of different sounds and other noises for him to try and mimic.

"How did Pear actually get that name?" wonders Troj, gently stroking the bird's head.

"Ah, that's actually quite a funny story," giggles grandmother. "It happened like this," she begins. "Grandfather and I were talking for a long time about the fact that we really wanted a bird or two, both at home and here in the shop. I said that I thought we should have some buggies. Grandfather started to laugh and said it was called budgies, not buggies. He then said that he had always longed to have a parrot," she continues. "But he said pearot, not parrot. So I could tease him a little and say it's actually called a parrot and is spelt with an 'arr' and not an 'ear'. We both then started to say pear-ot just because it sounded so funny. When we finally found our little Pear, we decided to call him exactly that."

"Oh yes my dear," says grandfather, looking tenderly at my grandmother. "We might not be the best spellers."

Troj and Nova giggle a little.

Part B

A man with a big dog comes into the shop.

“Oh, oh, oh! Dog, dog!” cries Pear loudly.

Pear quickly flies into his cage and sits down. He hides his head under one wing. Pear is afraid of dogs.

“Calm down, calm down, Pear,” says Troj, and stands next to Pear’s cage to calm him down. “It’s okay,” he says, stroking Pear carefully.

Grandfather helps the man, who is there to buy food and toys for his dog.

A little while after the man and dog have left, Pear calms down and cautiously climbs out of the cage again. Grandfather says that Pear was scared by a dog many years ago and that they are trying to get him used to dogs and teach him not to be scared.

“But you have to take baby steps and not force him too much,” says grandfather. “It’s gotten much better, he’s honestly not nearly as scared now as he was before.”

“Nonsense, nonsense,” squawks Pear.

“Wow, what’s this?” wonders Nova, who has found a small device on a table.

“That’s what we use to put price tags on everything in the shop,” answers grandmother.

“Aha, can Troj and I have a go?” asks Nova.

“Yes, that looks like lots of fun!” says Troj.

Grandmother takes out a few things that need price tags and gives them a list of prices.

“We can take turns,” suggests Nova. “One of us can call out the price and the other can print the price tag. Then we can switch”. Troj nods in agreement and they get to it.

“This costs... 249,” starts Nova, pointing at a bag of cat food.

“Okay,” says Troj, and prints out a price tag.

“All of these cost... 55,” she continues, gesturing towards some dog toys.

“Hey, you scared me!” cried Nova suddenly. Pear had flown over and landed on her shoulder.

“543, 27, a huuundred,” he squawked. He had heard what they were doing and wanted to join in.

“Right, now I remember!” says Troj. Grandfather said that Pear likes to mimic and say different numbers. That is probably why he enjoys looking at that children’s programme so much. He mimics when they say different letters too. “What should we do now?” continues Troj. “We’ll just get confused if he butts in and says numbers.”

“I know, let’s trick him,” laughs Nova. “I have an idea. He won’t be able to do this. Listen! Are you ready? The next price tag will have 1 hundred, 2 tens and 5 units.”

“Okay, got it,” laughs Troj, and prints out a price tag.

Pear quiets down after a while and flies back to his cage. They managed to trick him, at least this time.

Part C

Very, very early in the morning, Troj and Nova are on their way to the pet shop. Today, grandmother and grandfather are going to celebrate that they have had their shop for a year, so there will be a 1st birthday party for the shop. The celebrations will include several competitions and special offers. There will be complementary snacks and refreshments and everyone who comes by will get a small gift. There is quite a lot to prepare and fix before everything starts.

But when Troj and Nova get there, the shop is closed, and grandmother and grandfather are nowhere to be found. There is a note on the door that says “opening soon”.

They have to knock several times before grandmother eventually comes and opens. She looks both stressed and a bit annoyed.

“Come in quick so I can close it again,” she says. “Pear is really wild today. He probably feels that we’re stressed and don’t have time for him. Animals normally pick up on these feelings. You also know that as soon as he feels we don’t have time for him, he gets up to some mischief. Do you know what he’s done this morning? Opened lots of the cages!” she continues, irritated. “We have animals everywhere! Several of the birds are loose, the rabbits are jumping around and all the guinea pigs are sitting and chewing on the bag of hay over there,” she says, pointing. “You can help get them back in their cages. Count them carefully!”

“Oh, oh, oh,” says Pear.

He knows that grandmother is annoyed with him, of course.

“Listen, my dear little Pear. I would like to say boo, boo, boo to you today instead.”

“Nonsense, nonsense,” squawked Pear in response.

When they round up all the animals, they can finally open the shop and the 1st birthday party can begin.

Nova and Troj’s friends Ludvig and Victor have brought along their two rabbits. In a little field behind the shop, they are going to show the visitors how the rabbits can jump over small obstacles. Ludvig and Victor usually go to different competitions with their rabbits and compete in rabbit jumping.

It’s a long day with a lot of visitors to the shop.

“Well, we’ve sure celebrated our 1st birthday party properly,” says grandfather to the children when the shop closed. “I see there’s a little cake left over. Let’s share it! Thanks a lot for all your help!”

Part D

Nova and Troj are in the pet shop as often as they can and help out with all sorts of things.

They learn many things about how the different animals are to be cared for, what kind of food they eat, whether they like to play with toys and what kind of treats they can have.

Today there are quite a lot of people in the shop. Some of them are buying things and some are there to look at the animals. Ludvig, Victor and Sara, who are in the same class as Nova and Troj, are in the shop today.

When the shop is busy, Pear usually has to sit in his cage. As soon as someone walks past the cage, he cocks his head a bit to the side and says with his smoothest voice:

“Good day, good day, treats, treats...”

On the outside of his cage hangs a small sign that says “Do not feed the bird, descended from dinosaurs”.

“Grandfather, it look like Pear’s birdseed bowl is empty. Can I fill it?” calls Troj to grandfather, who is standing a bit further back in the shop.

“Sure, do that!” grandfather calls back, and continues helping a few customers to find what they are looking for on the shelves.

Nova and Troj fill up the bowl with birdseed and check that the other birds have seed in their bowls. They then go to the cages where the guinea pigs are.

“It feels weird that it has already been several months since my birthday,” says Nova. “How time flies! It feels like I just got my guinea pig. I got him the week after my birthday.”

“Hm, it feels like forever until my birthday!” Troj sighs. I wonder if I’ll get the tortoise I’m always asking for,” he continues.

“Well,” says grandfather, who has overheard what they were talking about. “A few months isn’t such a long wait. You two are lucky. What about your poor grandmother and I, who had to wait until we were adults before we could have any pets. You’re also lucky to have an aquarium with fish at school. Now you have a little time to read and find out everything about how to keep a tortoise happy. You should always think long and hard before taking on the responsibility of a pet.

And there are also many people that are not able to have certain types of pets, like people with allergies.”

“But, is it true that a tortoise can live to be 50-60 years old?” asks Nova.

“Yes, absolutely,” says grandfather. “Out in nature there are tortoises that get to be really, really old. There are tortoises older than 150.”

“Hm,” says Troj. “You have to think about these things too if you want to take care of a tortoise, for example. I should probably look into it and think about it a bit more.”

“Exactly, my boy! I see that you have understood me,” laughs grandfather.

Part E

Today, Troj and Nova get to help out with the rabbits. Grandmother asks what they would rather do, clean out the rabbits' cages or be outside with the rabbits for a while.

"Be outside with them, of course," they both say at once.

"Thought so," laughs grandmother. "But next time we switch jobs. When you have a pet you have to do both the fun stuff and things that are maybe a bit more boring."

"But it can actually be fun to make it really nice in the cages too," says Nova.

"Yes, and I like changing the water and making it nice for the fish in the aquariums. It feels good to give them a little special attention," says Troj.

At the back of the shop there is a small exercise area with a fence surrounding it. When the weather is nice, the rabbits are usually allowed to be out there for a bit so that they can frolic and jump about.

They help carry the rabbits out to the yard. You can tell that the rabbits like getting to be outside. They hop around and look very happy. Sometimes they stop to munch on some grass. Nova and Troj stand there looking at the rabbits. One of them has her little baby with her. The baby is not used to being outside yet, so it tries to stay as close to the mother as it can.

"Oh, look! It's so cute," says Troj, pointing. "Look how sweet the little bunny is when it tries to hop like its mother, even though it's so small! See how fast it has to hop to catch up with her."

When they come back into the shop, several of their friends are there. Some are there to buy things and some are there to look at the animals.

"Come and I'll show you all the awesome fish!" says Troj, and brings them over to the aquarium section. Troj suggests that they pick out a few fish that they think are the most beautiful.

"But wait a minute!" exclaims Nova suddenly. "What's he doing here?" she continues, pointing.

All the way across the shop is their teacher. He is standing talking to grandmother and grandfather.

Nova and Troj go over to them to say hi. They stop talking when they see the children and look like they are up to something.

"What are you doing here?" inquires Troj.

"We're not saying, because it's actually a secret," says the teacher, laughing. "Now I have to hurry off," he continues.

"I'll call you so we can decide more later," he says to grandmother and grandfather, and starts walking to the door. "Bye, see you in school!" he says, waving to Nova and Troj.

"That was weird," says Nova, and turns to Troj. "What secrets could they have together?"

Part F

“Is it true?!” exclaims Troj, as soon as he enters the pet shop. “Another tortoise!”

He quickly runs to the small aquarium that now contains three tortoises.

“Come and see, Nova, they’re so nice!” he says.

They stand looking at the tortoises for a while. Troj asks grandfather if he can pick one up if he is very careful. He stands completely still with the little tortoise in his arms. It does not seem to be scared, because it looks curiously up at Troj.

“He seems to like you,” says grandfather.

Troj hears nothing, he is transfixed by the cute little tortoise.

“Wow, you also got a new rabbit?” Nova asks, walking to one of the cages. “But wait, that’s strange,” she continues. “This looks exactly like the rabbit that went to live with a family a while back. Right?”

“Yes, that’s right,” says grandmother, coming up to Nova. Grandmother looks a little sad. “We had to take the rabbit back, you see. It was really unfortunate. But it was better than having it be unhappy somewhere,” continues grandmother. “Apparently the family had not really thought it through before getting a rabbit. You have to always, always do that!” she says, emphatically. “Before you decide to take on the responsibility of a pet, you have to consider it carefully. It’s not something you just get because you feel like it. It’s a lot of work to take care of a pet. I get very upset when people don’t understand that. You have to consider whether you have the time and if you are really interested. You also have to find out everything about what the animal needs to be happy before you decide to get a pet.

“Treats, treats!” Pear yells. He flies over and lands on grandmother’s shoulder. He cocks his head a little to the side and clicks his tongue.

“Oh, you think you need a treat?” Nova laughs. “Can we give him a few nuts, grandmother?” she continues.

“Okay then, but really he shouldn’t get a treat every time he asks, otherwise he’ll never stop nagging like that.”

“Nonsense,” answers Pear.

Part G

Nova and Troj are standing looking at all the fish in the shop's aquariums.

"Imagine all the types of fish there are," says Troj. "I just can't get enough of them. I could stand here looking at them all day. How they swim around, look for food and hide from each other."

"This one is cool, Troj," says Nova, and points at a fish moving around at the bottom of the aquarium. "It's helping to clean the bottom of the aquarium. And this one," she continues, pointing at another fish, "it almost looks like a little shark."

"Look at the fantastic colours they have," says Troj. "Some have stripes, some have spots, and they all look completely different. Nature is really clever. That they look special on purpose to help them survive out in nature, for example when other animals want to eat them."

"Remember in school when we got to look at different patterns on animals and plants?" asks Nova.

"Yes, exactly," says Troj. "I thought the sunflower and shells had cool patterns. If you look closely, you can actually find different patterns everywhere."

Pear is sitting on top of his cage.

"E E K, E E K, E E K, E E K," he suddenly exclaims.

"You really do go on sometimes, Pear!" says Troj. "He's been looking at that children's programme again. You know, where they say lots of letters, numbers and figures."

"But wait, listen carefully to him, Troj," says Nova. "It sounds like he's saying the letters in a pattern. Even though it does sound a little like nagging."

"Come on, Pear, say it again," encourages Nova, walking up to the cage. "E E K," she begins.

It is like pressing a button and Pear starts once more.

"E E K, E E K, E E K, E E K," he repeats.

"Yes, it does sound like he's saying the letters in a pattern," thinks Troj. "Thanks, that's enough now, Pear!" he says, offering him some nuts to make the parrot stop.

The trick with silencing him with nuts seems to work. Nova and Troj wink at each other and smile.

Ending

Finally it is Troj's birthday! At home that morning, he goes out to the hall. Standing there is a big wooden box. Yes, exactly, for a tortoise! Grandmother and grandfather have built a box in secret without Troj knowing. He now has two weeks to decorate it so that a tortoise can happily live there. Grandmother has found a tortoise that needs a new home since the family it lives with are moving abroad and cannot bring it along.

"Happy birthday, Troj!" says Nova, giving him a hug when they meet to walk to school together.

Troj is bubbling with joy and tells her about the big box he got and how he plans to decorate it for the tortoise.

"Imagine, they've been able to keep it a secret and not tell," says Troj. "Did you know anything about it, Nova?" he continues.

"Maybe," laughs Nova, looking a little mischievous. "But it's been really hard not to say anything. I nearly mentioned it a few times by accident. But you know, there's going to be one more surprise today," she continues. "Today we're finally going to find out what the secret was that grandmother and grandfather were whispering about to our teacher in the shop. He said yesterday that we're going to find out during the first lesson."

"We better hurry up!" says Troj, as they pick up the pace to get to the school faster.

The surprise turns out to be that grandmother and grandfather are coming to visit the class. Of course, the first thing they want to do is look at the classroom's aquarium. The children are praised for the work they have done making it nice for the fish. They then talk for a while about what it was like for them to be children and not be allowed to have pets, even though they wanted it so much. They also talk about how their dream of having a pet shop came true, and all the things they have learnt about different animals.

Finally, all the children get to ask questions about various things they want to know more about.

"What a nice surprise it was that they came to visit the class!" says Nova during break time.

"Yes, and what a great birthday!" says Troj.

"You see? Didn't the time to your birthday go by fairly quickly after all?" says Nova.

"Yes, you're right about that," answered Troj. "But do you know what I think Pear would say if he was here now?"

"Nonsense!" they both say at the same time, laughing.



2. Kopieringsunderlag

I det här kapitlet finns följande kopieringsunderlag att använda vid genomförandet av provet.

- Kopieringsunderlag 1: Self-assessment – Me and mathematics

Self-assessment – Me and mathematics



Colour the clouds
with the colour that
best matches how
you feel when you
are going to ...

green = sure
yellow = fairly sure
blue = not sure

... work out
something in your head,
for example $20 - 13$

... solve a
math problem

... show how
many halves
there are in
a whole

Me and mathematics

... estimate
how much
something holds

... use a written
method of
calculation

... follow
and repeat
a pattern

... explain what
units, tens and
hundreds are

... show which
arithmetic operation
you are going to use
in your working

