

## **Exemplar for Internal Achievement Standard**

### **Accounting Level 2**

This exemplar supports assessment against:

**Achievement Standard 91386**

Demonstrate understanding of an inventory subsystem for an entity

An annotated exemplar is an extract of student evidence, with a commentary, to explain key aspects of the standard. It assists teachers to make assessment judgements at the grade boundaries.

New Zealand Qualifications Authority

To support internal assessment

	Grade Boundary: Low Excellence
1.	<p>For Excellence, the student needs to demonstrate comprehensive understanding of an inventory subsystem for an entity.</p> <p>This involves:</p> <ul style="list-style-type: none"><li>• processing complex financial information for the entity's inventory subsystem</li><li>• justifying elements of the entity's inventory subsystem.</li></ul> <p>The student has processed complex inventory transactions on an inventory card.</p> <p>The student has explained and justified elements of the inventory subsystem and linked the justifications to the goals (1).</p> <p>Transactions have been integrated into the report (2).</p> <p>For a more secure Excellence, the student could explain terms such as re-order point and lead time (1), and provide further justifications, such as the reasons for authorisation, or the consequences of inventory loss detected through stocktakes (2).</p>

## Processing

*The student has accurately prepared a WAC inventory card for a stock item. (This could have been prepared for FIFO.) Processing is at Excellence level.*

### Describing elements of the entity's inventory subsystem

Customer satisfaction is a major goal of Fun Times. To build on this goal it is important that Graeme, the storeroom manager, watches when the stock on the shelves is getting old and makes sure that this is the first stock to be sold. Graeme also needs to make sure that the shelves are full with stock at all times. If this doesn't happen, customer satisfaction will decrease and Fun Times will lose sales, which will affect their profit. Profitability is another major goal of the business. The more sales they get, the more the income will increase and expenses will decrease, which will then cause the business profit to rise.

1

Fun Times uses a perpetual inventory system for recording the movement of the toys and puzzles. This means that every time a sale is made, the records of inventory are updated. It is a running record of inventory movements during a period of time. Inventory cards show a theoretical balance of inventory that Fun Times have on hand. This balance can then be confirmed by a physical stock take. This system is the most appropriate for Fun Times because it provides an up-to-date Cost of Goods Sold figure. Once the business knows the COGS figure they can then complete an income statement at any time to calculate profit. Fun Times can then monitor the profitability which is a major goal of the business.

1

The purchasing process is very important for Fun Times because Matthew, the owner, wants to ensure he has enough stock on hand to meet his customers' needs. On 18 August the purchase of 15 Lego toys was recorded when the goods arrived. Prior to receiving this order, Graeme placed the order with the supplier, however Mason had to authorise the order form before it was processed. ... Authorisation of purchases is important. When Mason signs/authorises the order before Graeme sends it off, he gets the chance to correct any of Graeme's errors. As owner he also gets an understanding of what stock he has and how long it takes for the inventory to arrive. To meet the customer satisfaction goal it is important that the correct amount of stock is on the shelves at the correct time.

2

The accounting software package used by Fun Times has been set up by Mason and Kelly to identify re-order points for each type of toy they stock. Each product has a different lead time depending on the supplier. By authorising the purchases Mason becomes familiar with the different lead times. This will allow him to decide on the quantities he needs to order by knowing what is already on its way and what they currently have in stock. This should allow him to meet the business goal of having sufficient quantities of hand to meet customer demands.

1

The lead time also helps to determine the re-order quantity. Sometimes Fun Times have issues with orders being held up due to the fact that many of their toys are imported. Looking at the inventory card, Fun Times waited until they had very few puzzles in stock before they ordered more. When they made a sale on 3 August for 12 puzzles to Toyworld, the inventory level got down to only three puzzles in stock. This is very risky because if a customer had suddenly wanted to buy five puzzles that order would not have been able to be filled and the customer might go and shop elsewhere. This would result in an unhappy customer and a loss in sales.

2

*Checking inventory received and internal control of documents omitted from this exemplar*

Fun Times uses a number of documents in their inventory subsystem. When stock is ordered they use order forms/purchase orders. When the order arrives in store Graeme matches the packing slip against the stock to ensure all inventory has been received. If a product has been damaged or mislaid, that product is sent back to the supplier with a credit note ... Some business have their own documents, however all documents have common internal control features – all are sequentially numbered, most will have multiple copies and many need to be authorised. The toy orders at Fun Times are filed electronically via email with toy suppliers. Mason uses an accounting software package for his inventory system so order forms are generated electronically.

It is essential that in any business there are only a small number of people who have authority to approve invoices for payments. Janice works in the office at Fun Times. Although she has a lot of experience in business, when an invoice arrives for payment she must staple it to the packing slip and give it to Matthew (the owner) to sign/off authorise. When she gets it back with Matthew's signature, Jayne then passes it onto Kelly who does the payments to suppliers online. This would have occurred when the inventory was received on 6 August. Having these three people involved means there is no chance of dishonesty in payments or receiving the goods. If they weren't authorised, the business could be spending money that wasn't required, which would increase expenses and affect the liquidity of Fun Times.

According to the inventory card for Lego toys on 31 August, Fun Times did a physical stock take. It was discovered that there were 20 Lego toys in stock when there should have been 21. This meant that there was an inventory shortage of one Lego toy. This stocktaking process is important because it allows Fun Times to track their missing items and maintain strong liquidity, which is a vital goal for the business.

	Grade Boundary: High Merit
2.	<p>For Merit, the student needs to demonstrate in-depth understanding of an inventory subsystem.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• processing detailed financial information for the entity’s inventory subsystem</li> <li>• explaining elements of the entity’s inventory subsystem.</li> </ul> <p>Complex inventory transactions have been processed on an inventory card, and this processing has been completed to Excellence level.</p> <p>The student has explained perpetual inventory and linked it to the goal of ensuring sufficient stock is on hand (1).</p> <p>The inventory control explanation provides details of the checking process when inventory arrives and again is linked to the goal of quality product (2).</p> <p>The stock take explanation includes the procedure used when stock is missing (3).</p> <p>Transactions have been integrated into explanations (4).</p> <p>While processing has been completed to Excellence level, this standard sits within the systems cell on the Accounting Matrix, therefore discussion of the inventory subsystem elements carries greater weighting in determining the grade.</p> <p>To reach Excellence, further justification is required. For example, the student could explain the consequence of a procedure not being carried out, such as when a delivery of inventory does not match the documents (3). An explanation of the process for accounting for the difference between the actual and theoretical stock balances could have been provided (4).</p>

## Processing

*The student has accurately prepared a WAC inventory card for a stock item. Processing is at Excellence level.*

### Describing elements of the entity's inventory subsystem

Mason uses a perpetual inventory system for recording the movement of his toys. He uses an accounting software package to his inventory system. This allows him to monitor the stock flow more easily. The First In First Out method, which is demonstrated on the inventory cards, allows Mason to know which toy was in which orders and how many of that order is left, therefore Mason will know the exact cost of each toy. This enables him to try and meet his business goal of being sure to have sufficient stock on hand so he is able to meet the customer's demands, while not over-stocking.

1

*The following sections have been omitted from this exemplar: authorisation of payments, managing inventory levels*

For Mason, the ordering process is very important because he needs to have enough stock on hand to meet the customers' needs. Graham is in charge of placing orders with the suppliers, although Mason must authorise every order form before it is sent. This will allow Mason to understand the lead time (the delay between the ordering and when the stock arrives) which is different depending on the supplier and this will allow him to decide on the amount he needs to order because he will know what is already on the way and what he already has in stock.

When the toys arrive in the storeroom Graham checks them. This is his way of ensuring quality control. Graham therefore maintains control of the product quantity and ensures the goods arriving have been ordered for the business. This is shown on 6 August where Graham received 20 Lego toys and 15 puzzles. He would check them when they arrive in the storeroom to ensure that this is the same as the order and packing slip. This allows Graham to meet the business goal of having high quality toys.

2

4

Graham always matches the product against the packing slip which shows him that he has received what is on the packing slip. Also, Graham matches the packing slip against the order form to ensure that the products he has received are what were ordered. Also, if an order is incomplete or if some of the products received are not good quality, Fun Times will receive a credit note as happened on 8 August when Mason received a credit note for three of the Lego toys purchased on 6 August as the toys were damaged.

3

4

On 31 August the inventory card shows that Fun Times completed a stock take. The perpetual inventory system allows Fun Times to identify that there was one Lego toy missing.

4

This is important to Mason because he will need to analyse what happened to this toy. If he finds out that it was stolen by one of the employees, he will need to keep a closer watch on him or her so there are no more thefts. This will help maintain the business goal of maximising profits by having more control over the business.

3

	Grade Boundary: Low Merit
3.	<p>For Merit, the student needs to demonstrate in-depth understanding of an inventory subsystem.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• processing detailed financial information for the entity's inventory subsystem</li> <li>• explaining elements of the entity's inventory subsystem.</li> </ul> <p>The student has accurately processed detailed inventory transactions on an inventory card.</p> <p>Some elements of the inventory subsystem have been explained, such as the timeliness of orders (1).</p> <p>The use of documents is explained by referring to the sequential numbering system and authorisation (2).</p> <p>Payment of invoices for stock is linked to the need for a positive relationship with the supplier (3).</p> <p>For a more secure Merit, each element of the subsystem needs to be explained by indicating why the procedure is necessary and how it helps the entity achieve its goals.</p>

## Processing

*The student has accurately prepared a FIFO inventory card for Lego toys at Merit level.*

## Describing elements of the entity's inventory subsystem

Fun Times is owned by Mason and Kelly. They are a wholesaler of children's toys. They use the FIFO method in their perpetual inventory system. Their main goals as a business are to have sufficient stock on hand to be able to meet all customers' orders, to maximise their profit by minimising their expenses, monitoring cash flow to ensure that financial commitments can be met all the time and to keep their customers happy by providing accurate and on time orders.

### Perpetual inventory system

Fun Times uses a computerised inventory system with a first in first out (FIFO) method. This is the best method to use with toys because, although they aren't perishable, they do date as with many products. The perpetual inventory system provides Fun Times with a continual record of their stock on hand. This is good for the re-ordering of stock.. This system helps Fun Times to meet their goal of having sufficient stock on hand to supply all customers.

### Authorisation of inventory purchases

The ordering processes are very important for Fun Times Graham, who works in the store room, is responsible for placing orders before they are processed. Every supplier requires an order number before the orders are processed. Fun Times has an accounting software package which has the reorder points for each product. This means when a certain toy reaches its reorder point Graham is notified to place another order. This is important because sometimes their order is held up because they are imported from overseas. So if Graham doesn't order on time then the order may not get to them in time to meet a customer's order, such as on the inventory cards for puzzles.

### Inventory received

When the inventory arrives in the store room Graham checks them to ensure quality control. If a product is damaged then he can get in touch with the supplier and get a credit. If Graham can check the quality of the toys it saves the customers receiving damaged toys which wouldn't be keeping customers happy which is one of the business goals. Graham always matches the products against the packing slip against the order form. This means Fun Times know if they don't receive what they ordered which means they maximise their profit by not paying for toys they didn't receive.

### Managing inventory levels

Fun Times are very good at managing their inventory levels. They have a good ordering system where only one person can order and the orders must be authorised by one person. Graham is the best person to be in charge of the ordering of stock because he knows how much of each product there is in the store room.

The toys for Fun Times must be ordered in advance because most of their products are imported and may be help up in shipping. Each product has a different lead



time to ensure that Fun Times doesn't sell out of any toys which could cause customers to be unhappy with Fun Times' service. Another way they manage their inventory levels is having Graham dealing with the despatch of inventory to clients, therefore he knows how much inventory there is left in the store room. For Fun Times to meet their goal of having sufficient stock on hand to meet all customers' orders they have to be able to manage their inventory levels well, which they do.

Fun Times has a good document system with cross checking orders, packing slips and invoices. All the documents for Fun Times should be sequentially numbered. The case study tells us that the order forms all must have an order number and the packing slip and invoices would match that number to save confusion between orders. They should have more than one copy of each document so anyone can access one at any time and to save confusion with losing documents. The documents in Fun Times are all authorised by a set person to save unnecessary paying or ordering of stock. This helps the business to be organised and can keep up with their goals of always making the client happy with their service.

2

#### Authorisation of payments

Kelly is responsible for paying the bills but before she even sees them Janice will staple the invoice to the packing slip and Mason must sign it off before Kelly can pay the supplier. The paying of invoices is very important for Fun Times because if they don't pay on time or don't pay enough it would upset the relationships with their supplier and they may lose their credit allowance or even lose their supplier then they couldn't keep their goals of having sufficient supply on hand to meet customers' needs. It is important to have only one person paying the bills because if anyone can pay them they may be paid twice which would affect their cash flow.

3

#### Stocktake

A physical stock take should be taken every one or two months. This is important because the perpetual inventory system gives Fun Times a theoretical record of their stock on hand. But this doesn't account for human error or theft. On the inventory card for Lego toys it shows a stock take was taken on the 31<sup>st</sup> of August showing a surplus of one Lego toy. This had to be updated because if a surplus or a shortage continued occurring it could mean Toys Direct ending up with too much or not enough stock on hand to meet their clients' orders.

	Grade Boundary: High Achieved
4.	<p>For Achieved, the student needs to demonstrate understanding of an inventory subsystem.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• processing financial information for the entity's inventory subsystem</li> <li>• describing elements of the entity's inventory subsystem.</li> </ul> <p>The student has processed transactions on an inventory card.</p> <p>Perpetual and periodic inventory systems have been described (1).</p> <p>Inventory cards have been discussed with the FIFO and WAC measurement methods included (2).</p> <p>The objectives of the inventory system are clearly stated, with some description of how they are met by the uniform shop's system (3).</p> <p>To reach Merit, a full explanation of each procedure is required. For example, the student could explain why authorisation is required for orders over \$500, and why retaining obsolete stock should be avoided (3).</p>

## Processing

*The student has accurately prepared a FIFO inventory card.*

## Describing elements of the entity's inventory subsystem

The uniform shop sells basic uniforms like PE shorts, shirt, socks, pants and jackets. It is staffed by Miss H, located at the student counter in C block and open on Mondays and Wednesdays from 8.30 to 11.30 am. Payment options are cash, EFTPOS and automatic payment.

There are two types of inventory systems, perpetual and periodic. The perpetual system requires the business to keep a running record of the inventory it should have on hand at any time. This system also requires a running record to be kept of the cost of goods sold. The periodic inventory system keeps a separate purchases account whenever inventory is purchased. The COGS is calculated at the end of the year. Using a periodic inventory system, a business does not know how much stock it should have unless it does a physical stocktake.

1

I think the uniform shop uses a perpetual inventory system because it keeps a theoretical record of the inventory they have on hand at any time and because the inventory system is computerised and because the uniform shop has a minimum stock level of 50 for each item. The uniform shop keeps a running record of the quantity of inventory it has and the COGS in its own ledger account.

### Inventory cards

Since the uniform shop uses a perpetual system it has to keep inventory cards (like ledger cards) for each type of inventory. They also have to decide which measurement to use to establish the cost of inventory, either FIFO (first in first out) or the weighted average. Inventory cards must be updated after every transaction affecting that particular inventory. The FIFO method keeps a running record of the inventory by ensuring that the business accounts for its inventory by selling the oldest stock first. Weighted average is the same as FIFO but instead of selling the oldest stock first it averages out the cost of the inventory after each transaction. I think the uniform shop uses the weighted average measurement base.

2

To ensure adequate levels of inventory are maintained at all times, the uniform shop stocks more school shirts and shorts than any other piece of uniform as these are the most popular among the students. They try to keep at least 50 of each item on hand at any time. I think the uniform shop meets this objective.

To ensure prompt and accurate processing of purchase requisitions and orders of inventory, Miss H has to request the purchase order number and get it authorised by Mrs R. If the inventory is over \$500 it has to be authorised by the principal Mr G then she gets a quote before sending the purchase order off to the supplier. I think the uniform shop meets this objective.

*Documentation, inventory records and internal control sections have been omitted*

3

To minimise the likelihood of obsolete stock being sold, the uniform shop sells old stock at discounted price to sell it first and also Miss H is the only person in charge of ordering so I think the uniform shop meets this objective.

To ensure prices of inventory purchases are quoted prior to purchase and the best value is sought, the uniform shop has a five year contract with ISO so the price remains the same for five years, so as to get the best deal. The uniform shop meets this objective.

To provide relevant and accurate information for decision-making in relation to the inventory system, the uniform shop uses MYOB for stock on hand and stock movement so they can keep track of how much stock they have on hand. If stock is being moved then they will know where it is going and the quantity of stock being moved. I think the uniform shop meets this objective.

	Grade Boundary: Low Achieved
5.	<p>For Achieved, the student needs to demonstrate understanding of an inventory subsystem.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• processing financial information for the entity's inventory subsystem</li> <li>• describing elements of the entity's inventory subsystem.</li> </ul> <p>Detailed financial transactions have been entered onto an inventory card.</p> <p>The student has described the authorisation process with some details (1).</p> <p>The perpetual inventory system has been discussed with a limited explanation as to why this system is used (2).</p> <p>The procedure for ordering stock is described along with the procedure used when stock arrives (3).</p> <p>Processing has been completed to Merit level. This standard sits within the systems cell on the Accounting Matrix, therefore discussion of the inventory subsystem elements carries greater weighting in determining the grade.</p> <p>For a more secure Achieved, the student could describe the goals or objectives of the uniform shop's inventory system. The processes could then be linked to the objectives, for example, ensuring that adequate inventory levels are maintained and adequate records are produced.</p>

## Processing

*The student has accurately prepared a FIFO inventory card.*

## Describing elements of the entity's inventory subsystem

### Extracts

Before Miss H is able to purchase a new order she is required to get authorisation from both the principal Mr G, and the executive officer Mrs R but only if the order is over \$500. If the order is under \$500 Miss H does not need authorisation from the principal, only Mrs R. When the order arrives Miss H then checks the packing slips with the order to see if the order is correct. I think this is great because this is a way to make sure that the order or suppliers didn't mess the order up.

1

The uniform shop uses the perpetual inventory system which tells Miss H what is in the uniform shop and what was sold. She is required to put all inventory on the system and also needs to include all the sales too. This will give a clear indication of what the shop has in stock. The uniform shop uses the perpetual inventory system because this system allows them to keep a running record of all the stock in the shop at all times. This system requires running records of all the stock entering or leaving the shop. The uniform shop meets these requirements by using the MYOB retailing system. This does everything that is needed when using the perpetual system and is also very easy and useful to use. Miss H can simply type in what has been brought into the shop and what has left. I can also identify the profit.

2

Miss H reorders stock when stock is at a level where the shop will not run out nor will the shop have too much inventory. When the minimum inventory level is met Miss H then completes the order form which is then sent to the supplier. Miss H also keeps a copy to make sure the order is correct when it arrives. When the uniforms arrive Miss H will then check the goods and check the packing slip is correct then will sign the slip, which will then be given to the accountant to also check whether the order is correct. From there the accountant will update the inventory ledger. This is great because this will stop the uniform shop exceeding their maximum storage and will easily be maintained. It is also good because it will stop any theft that may have taken place during the procedures.

3

Miss H does not use the FIFO system because the uniform will always be the same unless the uniform changes, then Miss H will put a discount on all the old stock and will try and sell them first.

The school purchases their uniforms from a supplier called ISC Linco. It usually takes about 2-7 days before orders arrive. This supplier is good because it's really cheap, it doesn't take long before it gets sent and the supplier keeps the school's uniforms in stock.

Overall I think Miss H is doing a great job of being in charge of the uniform shop but the only problem I think the uniform shop is that there needs to be more people involved as this will stop any unnecessary purchases.

	Grade Boundary: High Not Achieved
6.	<p>For Achieved, the student needs to demonstrate understanding of an inventory subsystem.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• processing financial information for the entity’s inventory subsystem</li> <li>• describing elements of the entity’s inventory subsystem.</li> </ul> <p>Transactions have been processed on an inventory card.</p> <p>The student has provided statements of fact about the entity’s inventory subsystem (1).</p> <p>Statements of fact have also been made about how the uniform shop meets its inventory subsystem objectives (2).</p> <p>To reach Achieved, the student could describe why processes occur and how they link to the objectives of the subsystem.</p> <p>Explanations about each objective could be expanded to relate theory to actual practice within the uniform shop. For example, as well as saying that authorisation is required for orders over \$500, there could be discussion of orders under this amount. A description of consequences of the lack of authorisation could also be provided as evidence towards Achieved.</p>

## Processing

*The student has accurately prepared a FIFO inventory card.*

## Describing elements of the entity's inventory subsystem

### Extracts

There are two inventory systems which are called perpetual and periodic. A perpetual inventory system requires the business to keep a running record at any time. This is the school's system. I know this because Miss H can look at how much stock she has on hand at any time on the programme she uses which is called MYOB. A periodic system means the business does not know how much stock she has on hand unless they do a stock take by hand.

1

The uniform shop uses MYOB to record the quantities of stock they have on hand. It also records the price of the item in MYOB.

In regards to stock levels, the uniform shop has a perpetual inventory system. If the uniform shop starts to run out of stock, Miss H has to request an order number when necessary. This is if the order is over \$500. Miss H has to request this from the executive officer, Mrs R.

1

Ensure adequate levels of inventory are maintained at all times:  
The uniform shop meets the objective of sensibly re-ordering quantities of stock. It does not meet the objective of putting one person in charge of ordering because Miss H is in charge of everything.

2

Ensure prompt and accurate processing of purchase requisitions and orders of inventory:  
The uniform shop meets this objective half way. This is because Miss H is in charge of everything and only one person should be in charge of purchase requisitions.

Ensure that all orders of inventory are legitimate and properly authorised:  
The uniform shop meets this goal because Miss H needs an authorisation/signature for orders over \$500.

### *Discussion of documentation and records objectives omitted from this exemplar*

To minimise the likelihood and amount of obsolete inventory:  
The uniform shop half meets this objective. The oldest stock isn't rotated and placed at the front of the shelves. I would recommend this, and this is called the FIFO system. Miss H is in charge of everything. To meet the objective, only one person should be in charge of this. I would recommend hiring more staff.

2

To ensure prices of inventory purchases are quoted prior to purchase and the best value is sought:  
The uniform shop meets this criteria as the school has a five year contract with the uniform supplier. This means the uniform buying price will remain the same.

To implement adequate internal controls to prevent errors and fraud, or to be able to identify problems in the inventory system:



The uniform shop half meets this criteria as there is no security option if fraud happens. I would recommend the school places security cameras throughout the uniform shop and outside of the shop.

To provide relevant and accurate information for decision making in relation to the inventory:

The uniform shop meets this objective as every bit of documentation is filed and updated regularly.