Hip replacement experts answer your questions a j Document

hip replacement experts answer your questions a j is a phrase that many patients searching for reliable information about hip replacement surgery encounter online. Whether you're considering a hip replacement or have recently undergone the procedure, understanding the process, recovery, and potential complications is essential. In this comprehensive guide, leading hip replacement specialists will answer your most common questions, providing clarity and expert insight to help you make informed decisions about your health.

What Is Hip Replacement Surgery?

Hip replacement surgery, also known as total hip arthroplasty, is a procedure in which a damaged or arthritic hip joint is replaced with a prosthetic implant. This surgery aims to relieve pain, improve joint function, and enhance overall quality of life.

Why Do Patients Need Hip Replacement?

- Osteoarthritis: The most common reason, causing cartilage breakdown
- Rheumatoid arthritis: An autoimmune condition leading to joint destruction
- Hip fractures: Severe fractures may require replacement
- Avascular necrosis: Death of bone tissue due to lack of blood flow
- Other conditions: Such as hip dysplasia or tumors

Common Questions About Hip Replacement Answered by Experts

1. How do I know if I need a hip replacement?

Hip replacement is typically recommended when conservative treatments no longer relieve pain and improve function. Symptoms indicating the need for surgery include:

- Persistent hip pain that worsens with activity or at rest
- Stiffness and reduced range of motion
- Difficulty walking or performing daily tasks
- Weakness in the hip or leg

Your orthopedic surgeon will evaluate your medical history, perform physical exams, and may order imaging tests like X-rays or MRIs to determine the severity of joint damage.

2. What are the different types of hip implants?

There are various types of prosthetic implants designed to suit individual patient needs:

- **Standard Hip Implants:** The most common, made of metal and plastic components
- **Resurfacing Implants:** Preserves more bone, suitable for younger, active patients
- **Minimally Invasive Implants:** Designed for smaller incisions and faster recovery
- **Custom Implants:** Tailored to specific anatomical needs

Your surgeon will recommend the most appropriate implant based on your age, activity level, and bone quality.

3. What is the recovery process like after a hip replacement?

Recovery varies per individual but generally involves several stages:

- **Hospital Stay:** Usually 1-3 days post-surgery, during which pain management and initial mobility exercises are initiated
- **Early Rehabilitation:** Focuses on walking with assistive devices, gentle exercises, and preventing blood clots
- **Physical Therapy:** Continues at outpatient clinics or at home to restore strength and flexibility
- **Full Recovery:** Typically occurs within 3-6 months, with most patients returning to normal activities

Your surgeon and physical therapist will guide you through tailored rehabilitation plans.

4. Are there risks or complications associated with hip replacement?

Like all surgeries, hip replacement carries some risks, though serious complications are rare:

- Infection at the surgical site
- Blood clots in the legs or lungs
- Dislocation of the prosthetic joint
- Loosening or wear of the implant over time
- Leg length discrepancy

- Nerve or blood vessel injury

Discussing these risks with your surgeon helps in understanding how they are minimized and managed.

5. How long do hip replacements last?

Most modern hip replacements last between 15 to 20 years, with many lasting longer. Factors influencing lifespan include:

- Patient activity level
- Weight management
- Implant type and surgical technique
- Bone quality

Advancements in materials and surgical methods continue to improve durability.

Preparing for Hip Replacement Surgery

Proper preparation can significantly influence your surgical outcome and recovery experience.

Preoperative Assessments

Your healthcare team will perform:

- Blood tests
- Imaging studies
- Cardiac and pulmonary evaluations
- Review of current medications and medical history

Preoperative Instructions

To optimize your readiness:

- Manage existing health conditions
- Stop certain medications as advised (e.g., blood thinners)
- Arrange for postoperative care and transportation
- Prepare your home for mobility aids and safety

Postoperative Care and Long-Term Outcomes

Successful recovery depends on diligent follow-up and lifestyle adjustments.

Postoperative Follow-Up

Regular appointments will monitor implant positioning, healing, and address any concerns.

Rehabilitation and Lifestyle

Maintaining a healthy weight, engaging in low-impact exercises, and following your physical therapist?s advice promote longevity of your hip replacement.

Expert Tips for a Smooth Hip Replacement Experience

- Communicate openly with your healthcare team
- Follow all pre- and postoperative instructions carefully
- Engage actively in physical therapy
- Avoid high-impact activities that could damage the implant
- Maintain a healthy lifestyle to prolong implant lifespan

Conclusion

When considering hip replacement, consulting with experienced orthopedic surgeons ensures you receive personalized care tailored to your needs. Hip replacement experts are equipped to answer your questions, guide you through the surgical process, and support your recovery journey. By understanding the procedure, potential risks, and postoperative expectations, you can approach your treatment with confidence, aiming for a pain-free, active life ahead.

If you have further questions about hip replacement, don?t hesitate to reach out to qualified orthopedic specialists. Your path to improved mobility and quality of life starts with informed decisions and expert guidance.

Hip replacement experts answer your questions a j: Navigating the Path to Pain-Free Movement

Hip replacement surgery has become a transformative procedure for millions suffering from debilitating hip conditions, such as osteoarthritis, rheumatoid arthritis, avascular necrosis, and traumatic injury. As advancements in surgical techniques, implant materials, and postoperative care continue to evolve, patients often find themselves with numerous questions about the procedure, recovery, and long-term outcomes. To shed light on these concerns, leading orthopedic specialists

and hip replacement experts have provided insights into the most common and pressing questions surrounding this life-changing operation.

In this comprehensive article, we explore the nuances of hip replacement surgery through a detailed examination of expert opinions, clinical data, and patient-centered considerations. Whether you're contemplating surgery or seeking to understand the latest innovations, this review aims to inform and empower you with evidence-based knowledge.

Understanding Hip Replacement: What Is It and Who Needs It?

What Is Hip Replacement Surgery?

Hip replacement, also known as total hip arthroplasty (THA), is a surgical procedure that involves removing damaged or diseased parts of the hip joint and replacing them with artificial components called prostheses. The primary goal is to restore mobility, reduce pain, and improve quality of life for individuals with severe hip joint deterioration.

The procedure typically involves:

- Resurfacing the femoral head (ball of the hip joint)
- Replacing the acetabulum (hip socket) with a prosthetic cup
- Attaching a stem and ball to the femur to mimic natural joint movements

Modern advancements have introduced minimally invasive techniques, improved implant materials, and computer-assisted navigation, enhancing outcomes and recovery times.

Who Are Ideal Candidates for Hip Replacement?

While age is a factor, it is not the sole criterion. Experts emphasize that the decision to proceed with hip replacement depends on the severity of symptoms, functional impairment, and overall health status.

Common indications include:

- Chronic hip pain unresponsive to conservative treatments like medications, physical therapy, and injections
- Significant limitation in mobility affecting daily activities
- Radiographic evidence of joint degeneration, such as cartilage loss, bone spurs, or joint space narrowing

- Conditions like osteoarthritis, rheumatoid arthritis, avascular necrosis, or post-traumatic arthritis

Ideal candidates typically:

- Are in good overall health with manageable comorbidities
- Have realistic expectations about surgical outcomes
- Are motivated to participate in rehabilitation

Expert Insights on Surgical Techniques and Innovations

Traditional vs. Minimally Invasive Techniques

Historically, hip replacement involved a sizeable incision and extensive soft tissue dissection. While effective, these traditional methods often resulted in longer hospital stays and recovery periods.

Minimally invasive surgery (MIS) has revolutionized the field, characterized by:

- Smaller incisions (typically 3-6 inches)
- Reduced soft tissue trauma
- Less postoperative pain
- Shorter hospital stays
- Faster return to activities

However, experts caution that MIS is technically demanding and not suitable for all patients, especially those with complex anatomy or significant deformities. Proper case selection and surgeon experience are critical determinants of success.

Advancements in Implant Materials and Design

Design improvements aim to enhance durability, reduce wear, and improve biocompatibility.

- Bearing surfaces: Ceramic-on-ceramic, metal-on-polyethylene, and ceramic-on-polyethylene options each have distinct advantages and drawbacks concerning wear rates and risk of dislocation.
- Stem designs: Cemented vs. cementless stems are chosen based on bone quality, with cementless options promoting biological fixation.
- Customized implants: 3D printing and patient-specific implants are emerging, offering tailored fit and potentially better outcomes.

Addressing Patient Concerns: Pain, Recovery, and Long-Term Outcomes

Will I Experience Pain During and After Surgery?

Postoperative pain management is a priority, and most patients report significant pain relief within weeks. Experts emphasize that some discomfort during recovery is expected but manageable with multimodal pain control strategies, including medications, nerve blocks, and physical therapy.

Long-term, the goal is to eliminate chronic joint pain that previously limited mobility. A well-performed hip replacement often results in pain relief exceeding 90%, vastly improving patient quality of life.

What Is the Typical Recovery Timeline?

Recovery varies based on age, health status, surgical technique, and adherence to rehabilitation protocols. A general timeline includes:

- Immediate postoperative period (0-2 days): Focus on pain control, mobilization out of bed, and gentle exercises.
- First few weeks: Gradual increase in activity, walking with assistive devices, and wound healing.
- 6-12 weeks: Most patients resume normal activities, with ongoing physical therapy to restore strength and range of motion.
- Long-term: Full recovery may take up to a year, with continued improvements in function and comfort.

Experts recommend early mobilization and physical therapy to prevent complications like blood clots, muscle atrophy, and joint stiffness.

What Are the Risks and Complications?

While hip replacement is generally safe with high success rates (over 90-95%), potential risks include:

- Dislocation of the prosthesis
- Infection
- Blood clots
- Loosening or wear of the implant over time
- Fracture around the implant

- Nerve or blood vessel injury

Most complications are preventable with meticulous surgical technique and postoperative care. Patients should discuss individual risk factors with their surgeon.

Longevity and Future of Hip Replacement

How Long Do Hip Replacements Last?

Implant longevity is a critical concern, especially for younger, active patients. Current data suggests:

- Average lifespan of 15-20 years
- Some implants last over 25 years with proper care

Factors influencing durability include:

- Implant material and design
- Patient activity level
- Surgical technique
- Biological factors like bone quality

Ongoing research aims to develop more durable materials and advanced fixation methods to extend prosthesis lifespan.

Emerging Technologies and Research

Future directions in hip replacement include:

- Robotics and computer-assisted surgery: Enhancing precision in implant placement
- Biologic solutions: Tissue engineering and regenerative medicine aiming to repair or regenerate damaged cartilage
- Smart implants: Incorporating sensors to monitor implant integrity and early signs of failure
- Minimally invasive and outpatient procedures: Reducing hospitalization and recovery times further

Experts underscore that personalized medicine, combining imaging, genetic testing, and advanced biomaterials, will shape the future of hip arthroplasty.

Choosing the Right Surgeon and Center

What Should Patients Look for in a Hip Replacement Specialist?

Selecting an experienced orthopedic surgeon specializing in hip replacements is vital. Consider:

- Surgeon?s volume of hip replacement procedures
- Outcomes and complication rates
- Access to advanced surgical techniques
- Patient reviews and testimonials
- Accreditation of the surgical center

Importance of a Multidisciplinary Approach

Optimal outcomes are achieved through a team approach, including:

- Preoperative assessment and optimization
- Skilled anesthesia and perioperative care
- Dedicated physical therapy
- Postoperative follow-up and monitoring

Collaborative care ensures personalized treatment plans and addresses individual patient needs.

Conclusion: Making an Informed Decision

Hip replacement surgery offers a significant opportunity to regain mobility, reduce pain, and enhance overall quality of life. While the procedure has become increasingly safe and effective, understanding the nuances?from surgical techniques and implant choices to recovery expectations?is essential for patients considering this option. Consulting with experienced specialists, asking informed questions, and adhering to postoperative protocols are key steps toward a successful outcome.

As research continues to push the boundaries of technology and materials, the future of hip arthroplasty looks promising, with longer-lasting implants and less invasive procedures on the horizon. Empowered with expert insights and evidence-based information, patients can confidently navigate their journey toward pain-free, active living.

QuestionAnswer What are the most common signs that indicate I might need a hip replacement? Common signs include persistent hip pain, stiffness limiting movement, reduced mobility, and pain

that worsens with activity. If conservative treatments fail, consulting an expert is recommended. How do I know if I am a good candidate for hip replacement surgery? Candidates typically have severe hip pain affecting daily activities, decreased quality of life, and have tried non-surgical options. A thorough evaluation by a hip replacement specialist can determine eligibility. What are the latest advancements in hip replacement techniques? Recent advancements include minimally invasive surgery, custom 3D-printed implants, and improved materials that enhance durability and reduce recovery time. What is the expected recovery time after a hip replacement? Most patients can walk with assistance within a day or two, and return to most normal activities within 4 to 6 weeks. Full recovery may take up to 3 months or more, depending on individual health. Are there any risks or complications associated with hip replacement surgery? Risks include infection, blood clots, implant loosening, and nerve injury. However, with proper surgical techniques and postoperative care, these risks are minimized. How can I prepare for my hip replacement surgery? Preparation includes preoperative assessments, quitting smoking, maintaining a healthy weight, and following your surgeon's instructions on medication and activity modifications. What are the long-term outcomes of hip replacement surgery? Most patients experience significant pain relief and improved function for 15-20 years. Advances in implant technology continue to extend the longevity of hip replacements. How do I choose the right hip replacement expert for my surgery? Look for a board-certified orthopedic surgeon with specialized experience in hip replacements, good patient reviews, and a track record of successful outcomes.

Related keywords: hip replacement, joint surgery, orthopedic specialists, hip pain, surgical options, recovery tips, anesthesia, hip implant, post-operative care, patient questions

Masterprose Study Questions

Masterprose study questions have become an essential resource for students and educators aiming to deepen their understanding of literary works, improve critical thinking skills, and excel in assessments. As a comprehensive tool, these questions facilitate active engagement with texts, enabling learners to analyze themes, characters, and literary devices more effectively. In this article, we will explore the importance of masterprose study questions, how to utilize them effectively, and tips for mastering your studies with these valuable resources.

Understanding the Significance of Masterprose Study Questions

What Are Masterprose Study Questions?

Masterprose study questions are carefully curated questions designed to accompany literary texts or educational content. They serve as prompts that guide students through critical analysis,

comprehension, and interpretation of literary works. These questions often cover various aspects such as plot, character development, themes, symbols, and writing style.

Why Are They Important?

Using masterprose study questions offers numerous benefits:

- **Enhanced Comprehension:** They push students to think deeply about the text, ensuring a better grasp of the material.
- **Critical Thinking Development:** These questions challenge learners to analyze and evaluate literary elements critically.
- **Exam Preparation:** They align with curriculum standards and exam formats, making revision more targeted and effective.
- **Active Engagement:** Moving beyond passive reading, students actively interact with the text.
- **Writing Skills Improvement:** Responding to questions helps refine analytical and argumentative writing abilities.

How to Effectively Use Masterprose Study Questions

1. Familiarize Yourself with the Material

Before tackling the questions, ensure you have read the literary work thoroughly. Take notes on key elements such as plot points, character traits, and significant symbols. This foundational understanding will make your responses more insightful.

2. Approach Questions Strategically

Not all questions require the same level of detail. Some may prompt simple recall, while others demand deep analysis.

- **Start with comprehension questions:** These confirm your understanding of basic facts.
- **Progress to analytical questions:** Focus on themes, motives, and literary devices.
- **Reflect on personal interpretation:** Consider your perspective and how it relates to the text.

3. Develop Thoughtful and Well-Structured Responses

When answering:

- **Use Evidence:** Support your points with direct quotes or references from the text.
- **Be Clear and Concise:** Communicate your ideas effectively without unnecessary verbosity.
- **Organize Your Answers:** Use paragraphs, topic sentences, and logical flow.

4. Practice Regularly

Consistent practice with study questions enhances comprehension and confidence. Set aside dedicated time to review questions after reading assignments or before exams.

5. Discuss Responses with Peers or Educators

Engaging in discussions helps you see different perspectives and deepen your understanding. Consider joining study groups or seeking feedback from teachers.

Tips for Mastering Study Questions in Different Contexts

Using Masterprose Study Questions for Exam Preparation

- Simulate Exam Conditions: Practice answering questions within time limits to build exam readiness.
- Identify Weak Areas: Focus on questions you find challenging to strengthen your knowledge.
- Review Model Answers: Compare your responses with model answers or teacher feedback to improve.

Incorporating Study Questions into Writing Assignments

- Outline Essays Based on Questions: Use questions as essay prompts to organize your thoughts.
- Develop Thesis Statements: Frame your responses around central ideas prompted by the questions.
- Cite Evidence Effectively: Support your arguments with quotations from the text.

Enhancing Literary Analysis Skills

- Break Down Complex Questions: Analyze what the question asks for before responding.
- Identify Literary Devices: Recognize metaphors, symbolism, and stylistic elements related to the question.
- Compare and Contrast: Use questions that ask for comparisons to develop comparative

analysis skills.

Common Types of Masterprose Study Questions

Recall and Comprehension Questions

These questions test your understanding of factual information in the text.

- Who are the main characters?
- What is the setting of the story?
- Summarize the plot of the chapter.

Analysis and Interpretation Questions

These encourage critical thinking about literary elements.

- What is the significance of the symbol used in the story?
- How does the author develop the protagonist's character?
- What themes are explored in the narrative?

Opinion and Personal Response Questions

These questions invite personal reflection and interpretation.

- What is your opinion of the ending?
- How do you relate to the main character's experiences?
- What message do you think the author intended to convey?

Comparison and Contrast Questions

These involve analyzing similarities and differences between texts or characters.

- Compare the themes of two different stories.
- Contrast the protagonists' motivations.
- How do two authors approach the same theme differently?

Creating Your Own Masterprose Study Questions

While many resources provide pre-made questions, developing your own can significantly enhance comprehension.

- Identify key themes, characters, and symbols.
- Formulate questions that challenge your understanding at various levels.
- Mix factual, analytical, and opinion-based questions for a balanced approach.
- Seek feedback from teachers or peers to refine your questions.

Conclusion

Masterprose study questions are invaluable tools that foster active learning, critical analysis, and exam success. By integrating these questions into your study routine, you can develop a deeper understanding of literature, enhance your analytical skills, and perform confidently in assessments. Remember to approach each question thoughtfully, support your responses with evidence, and continually challenge yourself with new prompts. With consistent practice and strategic use, masterprose study questions can significantly elevate your literary comprehension and academic performance.

MasterProse Study Questions have become an essential resource for students and educators aiming to deepen their understanding of literary works and improve analytical skills. These study questions serve as a comprehensive guide, fostering active engagement with texts through targeted prompts, thought-provoking inquiries, and structured activities. As the educational landscape shifts toward more interactive and student-centered learning, MasterProse Study Questions offer a valuable tool to facilitate critical thinking, textual analysis, and exam preparation. In this article, we will explore the features, benefits, potential drawbacks, and best practices for utilizing MasterProse Study Questions effectively.

Overview of MasterProse Study Questions

MasterProse Study Questions are curated sets of questions designed to accompany literary texts, including novels, plays, poems, and essays. They are typically organized to align with the progression of the work, encouraging students to analyze characters, themes, literary devices, and authorial intent. These questions aim to promote close reading and analytical thinking, helping students develop a nuanced understanding of complex texts.

Core Features of MasterProse Study Questions

- Structured Format: Questions are often grouped by chapters, acts, or sections, enabling step-by-step analysis.

- Diverse Question Types: Includes comprehension, interpretive, evaluative, and creative prompts.
- Answer Guides: Many sets provide suggested answers or discussion points, aiding teachers in assessment.
- Supplemental Resources: Often accompanied by thematic summaries, vocabulary lists, and contextual information.

Intended Audience

MasterProse Study Questions are tailored for a broad audience, including:

- High school students preparing for exams like the SAT, ACT, or AP Literature.
- College undergraduates engaging in coursework or research.
- Educators designing lesson plans or classroom activities.
- Self-learners seeking structured guidance in literary analysis.

Advantages of Using MasterProse Study Questions

Implementing these questions in the learning process offers numerous benefits:

Enhanced Critical Thinking Skills

By prompting students to analyze motives, symbols, and themes, these questions foster higher-order thinking. They challenge students to interpret texts beyond surface-level comprehension, encouraging deeper engagement.

Structured Learning Pathway

The organized nature of the questions provides a clear roadmap for studying. Students can systematically approach a text, ensuring comprehensive coverage and reducing confusion during revision.

Preparation for Assessments

MasterProse Study Questions mirror many exam formats, especially essay prompts and short-answer questions. Regular practice with these questions can boost confidence and improve exam performance.

Support for Teachers

Educators benefit from ready-made questions and answer guides, saving preparation time. The questions can serve as discussion starters, homework assignments, or assessment tools.

Encourages Active Reading

Rather than passively reading, students are prompted to actively analyze and reflect on the material, leading to better retention and understanding.

Limitations and Challenges of MasterProse Study Questions

Despite their many advantages, there are some limitations to be aware of:

Potential for Over-Reliance

Students may become dependent on structured questions, which could hinder the development of independent analytical skills if not balanced with open-ended discussions.

Question Quality Variability

Not all sets of study questions are equally well-crafted. Poorly designed questions can be superficial or misleading, leading to superficial understanding.

Limited Flexibility

Pre-made questions may not always align perfectly with specific teaching goals or student needs, requiring teachers to modify or supplement them.

Risk of Rote Learning

Students might focus on memorizing answers rather than engaging critically with the text, reducing genuine comprehension.

Cost and Accessibility

Some comprehensive sets of MasterProse Study Questions are behind paywalls or require subscriptions, potentially limiting access for some learners.

Best Practices for Using MasterProse Study Questions Effectively

To maximize their benefits, educators and students should consider the following strategies:

Complement with Open-Ended Discussions

Use the questions as a starting point, but encourage students to formulate their own questions and interpretations to foster originality and deeper understanding.

Customize and Expand

Adapt questions to suit specific learning objectives or student interests. Add prompts for creative responses or comparative analyses.

Balance Guided and Independent Learning

Combine structured questions with free-form activities like essays, presentations, or debates to develop a well-rounded skill set.

Use as Formative Assessment Tools

Employ the questions periodically to gauge understanding and adjust instruction accordingly.

Encourage Reflection

Prompt students to reflect on their responses and reasoning processes to develop metacognitive skills.

Integrating MasterProse Study Questions into Curriculum

Effective integration involves strategic planning:

Pre-Reading Activities

Introduce questions that activate prior knowledge or predict themes, setting a purpose for reading.

During Reading

Use questions to guide focused reading, highlighting key passages or literary devices.

Post-Reading Analysis

Assign questions that synthesize understanding, compare interpretations, or connect themes across works.

Assessment and Feedback

Utilize responses to evaluate comprehension and provide constructive feedback.

Conclusion

MasterProse Study Questions serve as a versatile and valuable resource in the realm of literary education. Their structured approach, diverse question types, and alignment with curriculum goals make them an effective tool for fostering critical thinking, comprehension, and analytical skills. While they are not without limitations, when used thoughtfully and in conjunction with other pedagogical strategies, they can significantly enhance the learning experience. Whether for students preparing for exams or educators designing engaging lessons, MasterProse Study Questions offer a pathway to deeper literary understanding and academic success. To maximize their potential, users should focus on customization, active engagement, and balancing guided questions with independent inquiry, ensuring a rich and stimulating exploration of literature.

QuestionAnswer What are masterprose study questions commonly used for? Masterprose study questions are used to help students analyze and understand literary texts more deeply by focusing on themes, characters, and stylistic elements. How can I effectively prepare for masterprose study questions? To prepare effectively, read the text thoroughly, identify key themes and literary devices, and practice answering different types of questions to improve comprehension and analytical skills. Are masterprose study questions suitable for all grade levels? Yes, they can be adapted for various educational levels by adjusting the complexity of the questions to match students? comprehension and analytical abilities. What types of questions are typically included in masterprose study questions? They often include comprehension questions, thematic analysis, character analysis, stylistic questions, and questions that require critical thinking and personal interpretation. How can teachers best utilize masterprose study questions in the classroom? Teachers can use them as discussion prompts, homework assignments, or exam questions to encourage critical thinking and ensure students engage deeply with the text. Where can I find practice masterprose study questions online? Many educational websites, literary resource platforms, and teacher forums offer practice questions tailored to various texts and grade levels. What skills do students develop by answering masterprose study questions? Students improve their analytical thinking, comprehension, textual evidence evaluation, and ability to articulate insights clearly. Can masterprose study questions be used for self-study? Yes, they are valuable for self-study, allowing learners to test their understanding and develop critical analysis skills independently. How do masterprose study questions differ from regular comprehension questions? Masterprose study questions typically require deeper analysis, interpretation, and critical thinking, whereas regular comprehension questions focus on understanding basic content.

Related keywords: masterprose, study questions, literature analysis, comprehension questions, literary themes, exam prep, classroom activities, critical thinking, reading comprehension,

educational resources

Read the full article online: MASTERPROSE STUDY QUESTIONS